This file is provided FREE OF CHARGE from the electromaniacs.com community
You are free to distribute this file to other persons who needs it , but without of charge

Also on http://electromaniacs.com you can find thousands of service manuals , schematics free of charge



TOSHIBA

FILE NO. 010-200328

SERVICE MANUAL

Plasma Display

50XP37C
50XP37E
50XP37F
50XP37H

Mar. 2004 (YC)

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

CONTENTS

Page

1 Applicable signals ··· **3**
2 Safety Precautions ··· **4**
2.1. General Guidelines ··· 4
3 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices ··· **5**
4 About lead free solder (PbF) ··· **6**
5 PCB Structure sheet of GPH6D2 chassis ··· **7**
6 Service Hint ··· **8**
7 Location of Lead Wiring ··· **9**
8 Adjustment Procedure ··· **10**
8.1. Driver Set-up ··· 10
8.2. Initialization Pulse Adjust ··· 11
8.3. P.C.B. (Printed Circuit Board) exchange ··· 12
8.4. Adjustment Volume Location ··· 13
8.5. Test Point Location ··· 13
9 Service mode ··· **13**
9.1. CAT (computer Aided Test) mode ··· 13
9.2. IIC mode structure (following items value is sample data.) ··· 15
10 Alignment ··· **16**
10.1. 625i/625p panel white balance ··· 16
10.2. PC/RGB panel white balance ··· 18
10.3. HD panel white balance ··· 19
11 Trouble shooting guide ··· **20**
11.1. Self Check ··· 20
11.2. No Power (Power shut down) ··· 20
11.3. No Picture ··· 21
11.4. Local screen failure ··· 22
12 Conductor Views ··· **23**
12.1. PF-Board ··· 23
12.2. P-Board ··· 25
12.3. HX-Board ··· 28
12.4. HV-Board ··· 29
12.5. HZ-Board ··· 30
12.6. HT-Board ··· 31
12.7. J-Board ··· 32
12.8. D-Board ··· 34
12.9. C1-Board ··· 37
12.10. C2-Board ··· 38
12.11. C3-Board ··· 39
12.12. C4-Board ··· 40
12.13. C5-Board ··· 41
12.14. C6-Board ··· 42
12.15. SC-Board ··· 43
12.16. SU-Board ··· 45
12.17. SD-Board ··· 47

Page

12.18. SS, SS2 and SS3-Board ··· 48
12.19. Z-Board ··· 50
12.20. V1, S1 and H3-Board ··· 51
13 Replacement panel handling precautions and replacement procedure ··· **55**
14 Parts Location ··· **57**
15 Chassis and Cabinet Replacement Parts List ··· **59**
16 Specifications ··· **END**

Appendix
Block and Schematic Diagrams

1 Applicable signals

VIDEO input

	signal name	horizontal frequency(kHz)	vertital frequency(Hz)
1	NTSC	15.734	59.95
2	PAL	15.625	50
3	PAL60	15.734	59.95
4	SECAM	15.625	50
5	Modified NTSC	15.734	59.95

∗ Mark:
By installing the optional Terminal Board.

Applicable input signals for PC Input (D-sub 15P) (* Mark)

	signal name	horizontal frequency(kHz)	vertital frequency(Hz)	RGB	PC	when Multi Screen and Digital Zoom
1	525(480)/60i	15.73	59.94	∗	∗	∗
2	525(480)/60p	31.47	59.94	∗	∗	∗
3	625(575)/50i	15.63	50.00	∗	∗	∗
4	625(575)/50p	31.25	50.00	∗	∗	∗
5	750(720)/60p	45.00	60.00	∗	∗	∗
6	750(720)/50p	37.50	50.00	∗	∗	∗
7	1,125(1,080)/60i	33.75	59.94	∗	∗	∗
8	1,125(1,080)/50i	28.13	50.00	∗	∗	∗
9	1,125(1,080)/24p	27.00	24.00	∗	∗	
10	1,125(1,080)/24sF	27.00	48.00	∗	∗	∗
11	1,250(1,080)/50i	31.25	50.00	∗	∗	∗
12	640 × 400@70 Hz	31.47	70.00		∗	∗
13	640 × 480@60 Hz	31.47	59.94		∗	∗
14	Macintosh13"(640 × 480)	35.00	66.67		∗	∗
15	640 × 480@75 Hz	37.50	75.00		∗	∗
16	852 × 480@60 Hz	31.50	60.00		∗	∗
17	800 × 600@60 Hz	37.88	60.32		∗	∗
18	800 × 600@75 Hz	46.88	75.00		∗	∗
19	800 × 600@85 Hz	53.67	85.06		∗	∗
20	Macintosh16"(832 × 624)	49.73	74.55		∗	∗
21	1,024 × 768@60 Hz	48.36	60.00		∗	∗
22	1,024 × 768@70 Hz	56.48	70.07		∗	∗
23	1,024 × 768@75 Hz	60.02	75.03		∗	∗
24	1,024 × 768@85 Hz	68.68	85.00		∗	∗
25	Macintosh21"(1,152 × 870)	68.68	75.06		∗	
26	1,280 × 1,024@60 Hz	63.98	60.02		∗	
27	1,280 × 1,024@75 Hz	79.98	75.03		∗	
28	1,280 × 1,024@85 Hz	91.15	85.02		∗	
29	1,600 × 1,200@60 Hz	75.00	60.00		∗	

2 Safety Precautions

2.1. General Guidelines

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

2.1.1. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1MΩ and 5.2MΩ.
 When the exposed metal does not have a return path to the chassis, the reading must be ∞ .

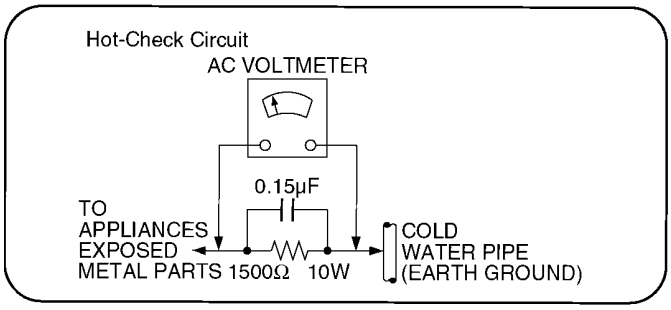


Figure 1

2.1.2. Leakage Current Hot Check (See Figure 1.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15µF capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

3 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as alminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, alminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

 Caution

 Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise hamless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are imporant for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

4 About lead free solder (PbF)

Note: Lead is listed as (Pb) in the periodic table of elements.

In the information below, Pb will refer to Lead solder, and PbF will refer to Lead Free Solder.

The Lead Free Solder used in our manufacturing process and discussed below is (Sn+Ag+Cu).

That is Tin (Sn), Silver (Ag) and Copper (Cu) although other types are available.

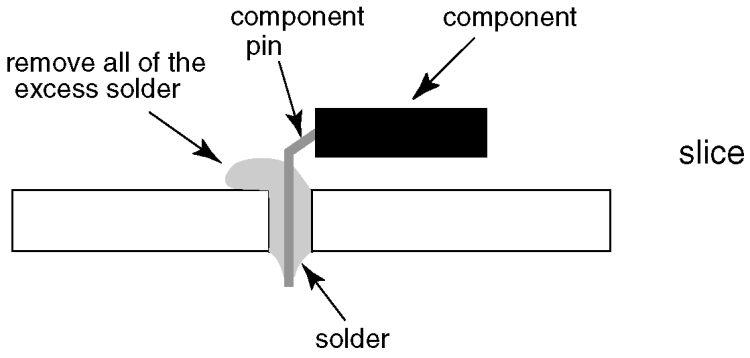
This model uses Pb Free solder in it's manufacture due to environmental conservation issues. For service and repair work, we'd suggest the use of Pb free solder as well, although Pb solder may be used.

PCBs manufactured using lead free solder will have the PbF within a leaf Symbol (PbF) stamped on the back of PCB.

Caution

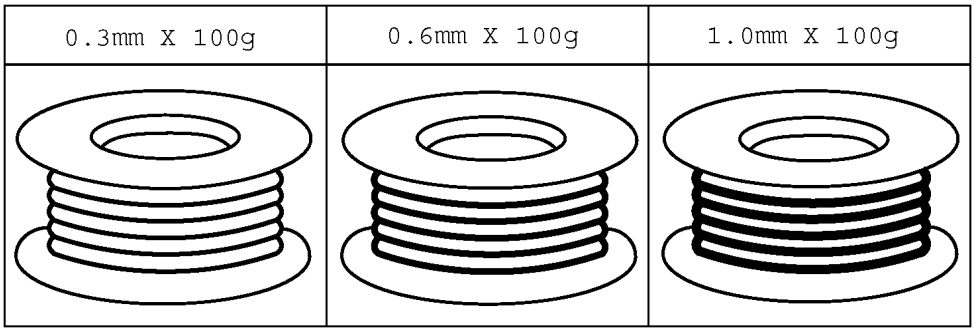
- Pb free solder has a higher melting point than standard solder. Typically the melting point is 50 ~ 70 °F (30~40 °C) higher. Please use a high temperature soldering iron and set it to 700 ± 20 °F (370 ± 10 °C).
- Pb free solder will tend to splash when heated too high (about 1100 °F or 600 °C).

 If you must use Pb solder, please completely remove all of the Pb free solder on the pins or solder area before applying Pb solder. If this is not practical, be sure to heat the Pb free solder until it melts, before applying Pb solder.
- After applying PbF solder to double layered boards, please check the component side for excess solder which may flow onto the opposite side. (see figure below)



Suggested Pb free solder

There are several kinds of Pb free solder available for purchase. This product uses Sn+Ag+Cu (tin, silver, copper) solder. However, Sn+Cu (tin, copper), Sn+Zn+Bi (tin, zinc, bismuth) solder can also be used.



5 PCB Structure sheet of GPH6D2 chassis

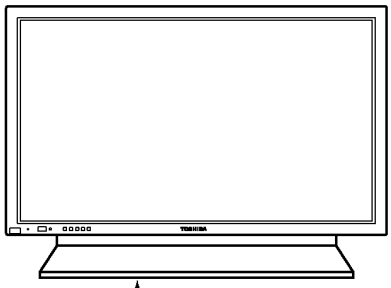
Board Name	Function	Remarks
D	Digital Signal Processor	1
J	Slot Interface & SYNC processor	1
Z	Audio out, DC-DC converter	
SS	Sustain Out	1
SC	Scan out	1
SU	Scan connection (Upper)	1
SD	Scan connection (Lower)	1
C1	Data Drive (Upper Right)	
C2	Data Drive (Upper Center)	
C3	Data Drive (Upper Left)	
C4	Data Drive (Lower Left)	
C5	Data Drive (Lower Center)	
C6	Data Drive (Lower Right)	
H3	Speaker terminal	
S1	Power switch	
SS2	Sustain connection (Upper)	
SS3	Sustain connection (Lower)	
V1	Front SW. & Remote receiver	
PF	Line filter	1
P	Power supply	1
HX	PC_type_Input terminal	
HZ (RTB033)	RCA Component Video terminal	
HV (RTB031)	RCA Composite Video terminal	
HT (RTB032)	21 Pin Scart terminal	

Remarks

1. Recommend PCB´s for initial service for GPH6D2 chassis.

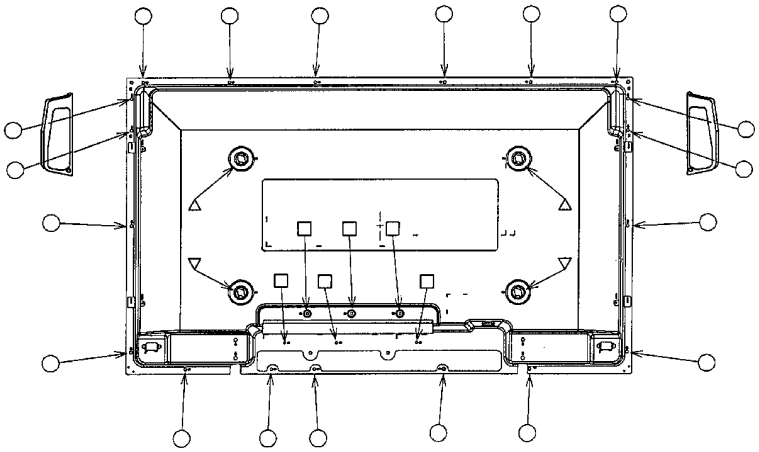
6 Service Hint

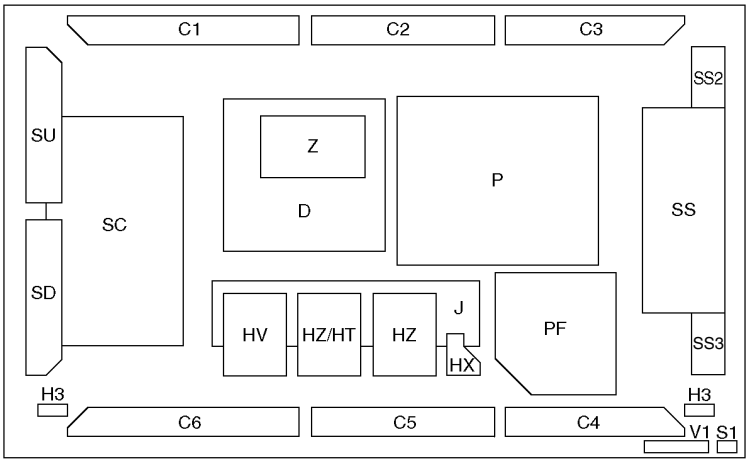
Stand the Unit used for Optional Accessory



Optional Accessory
(Pedestal)

Remove the Back Cover

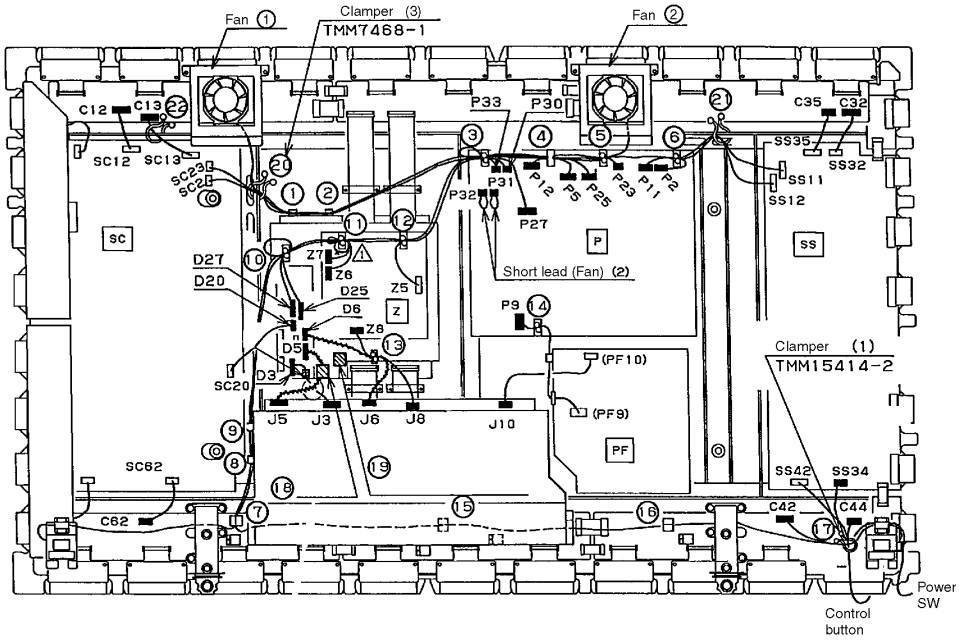




Remove: 4 screws (△) XYN8+F20FZ
6 screws (□) THEL023Z
19 screws (○) THTF010Z

Service Position

7 Location of Lead Wiring



< Note >
· Confirm the connection of D3 · D5 · J3 · J5 after clamp core.
· Locate the J5 - D5 lead over the J3 - D3 lead.

CON:NO. — CON:NO.	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰	⑱	⑲	⑳	㉑	㉒
SC2 — P2	○	○	○	○	○	○														○		
SC23 — P23	○	○	○	○	○															○		
SC20 — D20																						
D27 — P27			○							◎	○	○										
D25 — P25			○	○						◎	○	○										
D3 — J3																						
D6 — J6													○									
Z8 — J8													○									
D5 — J5																		○				
Z5 — P5			○	○								○										
SP (SC SIDE) — Z7							○	○	○	○	◎											
SP (SS SIDE) — Z6							○	○	○	○	○				○	○	○					
SS12 — P12				○	○	○														○		
SS11 — P11						○														○		
SS42 — C42																	○					
SS32 — C32																						
POWER SW — SS34																	○					
CONTROL BUTTON — C44																	○					
PF9 — P9														○								
PF10 — J10																						
FAN ① — P30	○	○	○																	○		
FAN ② — P33			◎	○	○																	
SS35 — C35																						
SC12 — C12																						
SC13 — C13																						○
SC62 — C62																						

◎ Wind up second times.

Connector Connection: P2, P5, P9, P11, P12, P23, P25, P27, P30, P31, P32, P33
Z6, Z7, Z8,
D3, D5, D6, D20, D25, D27
J3, J5, J6, J8, J10,
SS34,
C12, C13, C32, C35, C42, C44, C62

8 Adjustment Procedure

8.1. Driver Set-up

8.1.1. Item / Preparation

1. Input an APL 100 % white signal.
2. Set the picture controls: -

 Picture mode: Normal

 White balance: Cool

 Aspect: 16:9

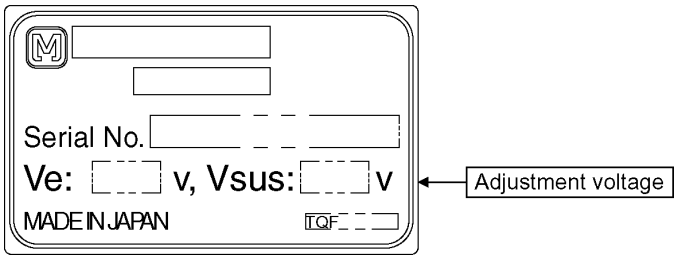
8.1.2. Adjustments

Adjust driver section voltages referring the panel data on the panel data label.

Name	Test Point	Voltage	Volume	Remarks
Vsus	TPVSUS (SS)	Vsus* ± 2V	R641 (P)	GND = chassis
Vbk	TPVBK (SC)	140V ± 1V	R6670 (SC)	GND = chassis
Vad	TPVAD (SC)	-85V ± 1V	R6477 (SC)	GND = chassis
Ve	TPVE (SS)	Ve* ± 1V	R6770 (SS)	GND = chassis
Vda	TPVDA (SS)	75V ± 1V	R665 (P)	GND = chassis
Vlow	anode of D540 (P)	78V ± 0.1V	R661 (P)	GND = chassis
PFC	PR401	395V ± 0.5V	R443 (P)	Hot=PR401, Cold= W14 (wire)

*See the Panel label.

Panel Label information

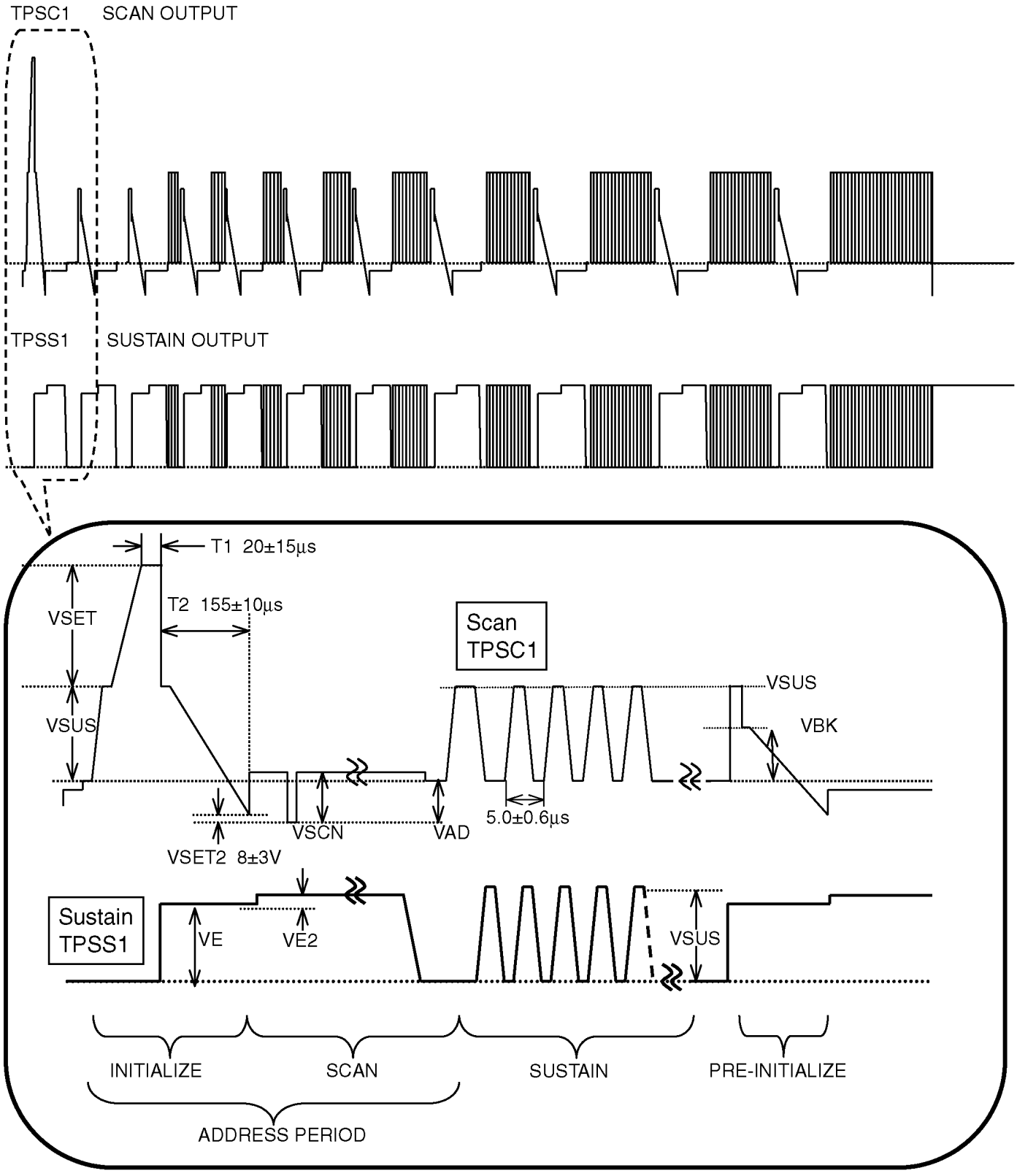


8.2. Initialization Pulse Adjust

1. Input a Cross hatch signal.
2. Set the picture controls: -
 Picture mode: Normal
 White balance: Cool

Adjust the indicated test point for the specified wave form.

	Test point	Volume	Level
T2	TPSC1 (SC)	R6557 (SC)	155 ± 10µ Sec



8.3. P.C.B. (Printed Circuit Board) exchange

8.3.1. Caution

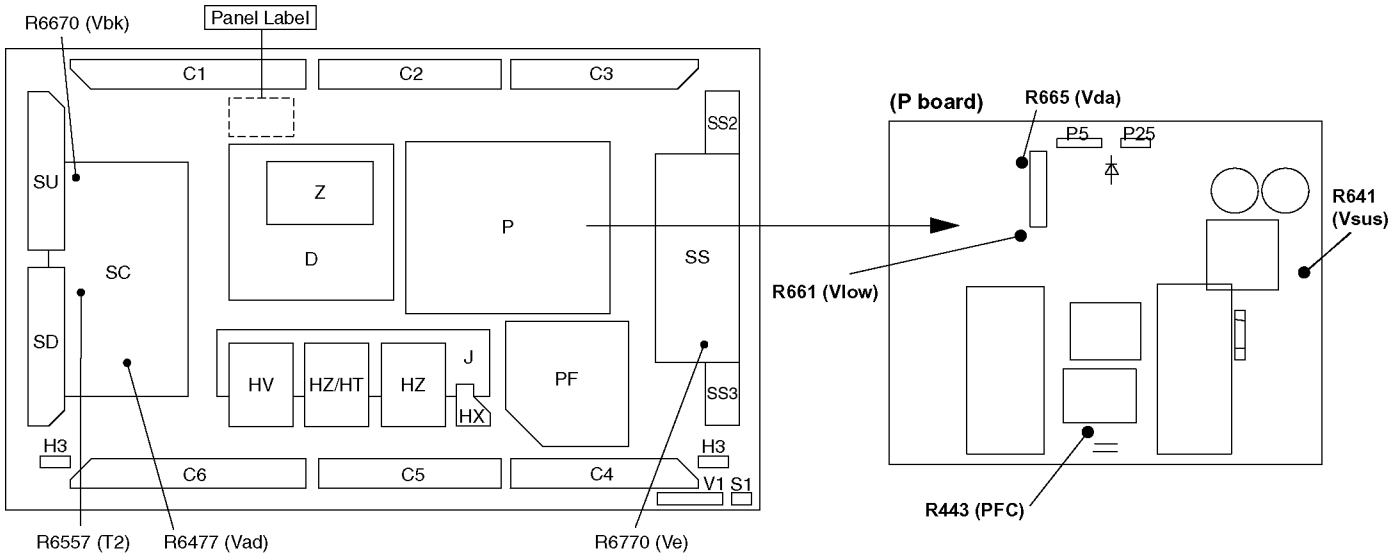
1. To remove P.C.B. , wait 1 minute after power was off for discharge from electrolysis capacitors.

8.3.2. Quick adjustment after P.C.B. exchange

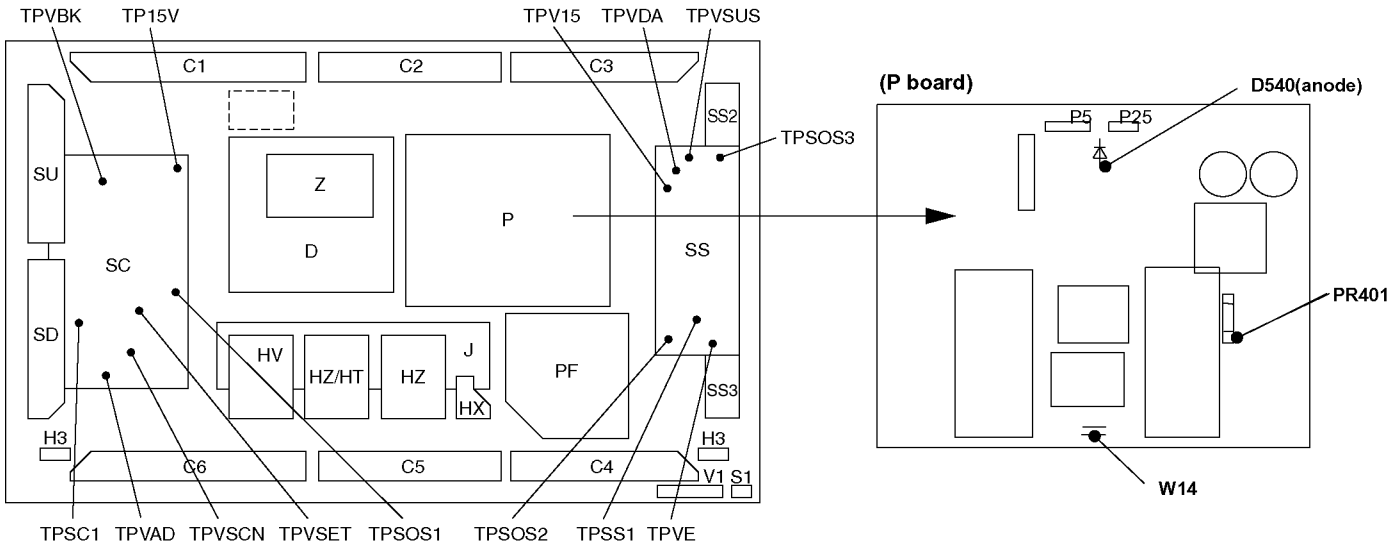
P.C.B.	Name	Test Point	Voltage	Volume	Remarks
P Board	Vsus	TPVSUS (SS)	Vsus* ± 2V	R641 (P)	GND = chassis
	Vda	TPVDA (SS)	75V ± 1V	R665 (P)	
SC Board	Vad	TPVAD (SC)	-85V ± 1V	R6477 (SC)	
	Vbk	TPVBK (SC)	140 ± 1V	R6670 (SC)	
SS Board	Ve	TPVE (SS)	Ve* ± 1V	R6770 (SS)	
D Board	White blance				

*See the Panel label.

8.4. Adjustment Volume Location



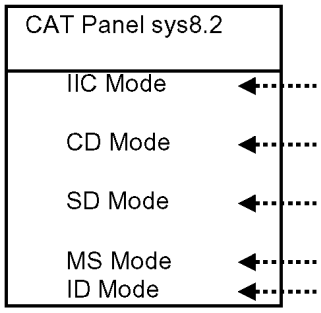
8.5. Test Point Location



9 Service mode

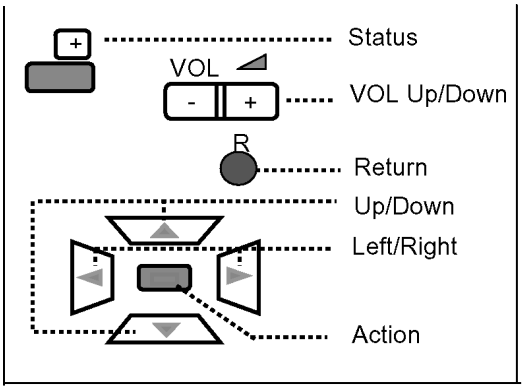
9.1. CAT (computer Aided Test) mode

CAT mode menu



Mode	Function	Access button
IIC	Service Alignment	Action
CD(Complete Diagnostics)	Software version information EEPROM edit	Mute more than 5 seconds
SD(Status Display)	MTBF parameter	Action
MS Mode	Not use	-----
ID	Not use	-----

Remote control



How to access the CAT mode.

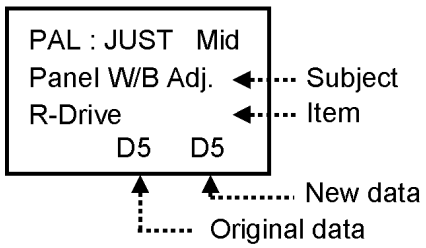
Press and the hold the Volume down / - buton on the front panel of the unit and press the status button on the remote control 3 times quickly within 1 second, this will place the unit into the CAT mode.

To exit the **CAT mode**, access the **ID mode** and switch off the main power.

9.1.1. IIC mode

Select the IIC mode by **Up/Down button** on the remote control at the front page of CAT mode then press the **Action button** on the remote control.

OSD



How to use the IIC mode.

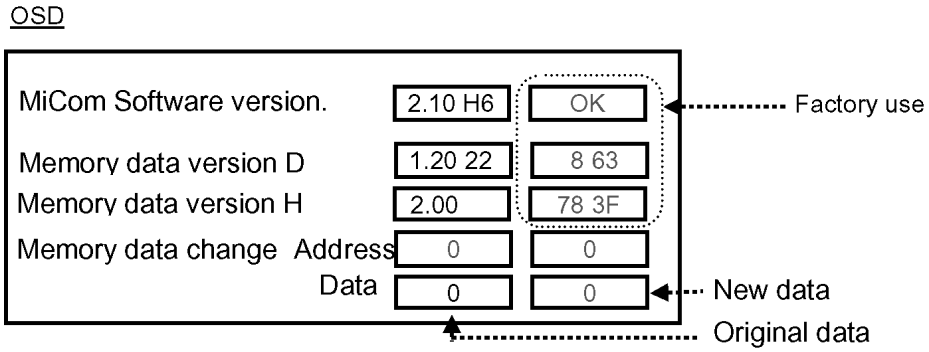
1. Select the alignment **Subject** by **Up/Down buttons** on the remote control.
2 .Select the alignment **Item** by **Left/Right buttons** on the remote control.
3. Adjust **optimum setting** by **Volume Up/Down buttons** on the remote control.
4. The **data is memorized** when press the **R button** on the remote control or change the alignment Subject (or Items).

Subject and item are mentioned on page 16.

To exit the IIC mode, press the **R button** on the remote control.

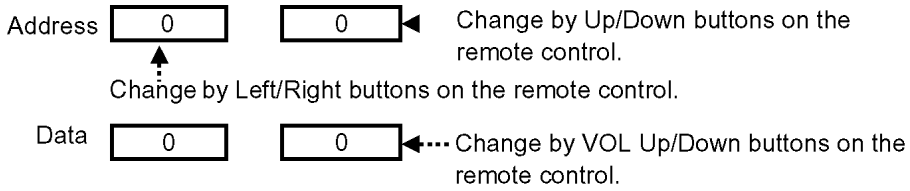
9.1.2. CD mode

Select the CD mode by **Up/Down button** on the remote control at the front page of CAT mode then press the **Mute button** on the remote control more than 5 sec.



Micom software version (IC9705), this version can be upgrade by replacing of IC.

Memory data change

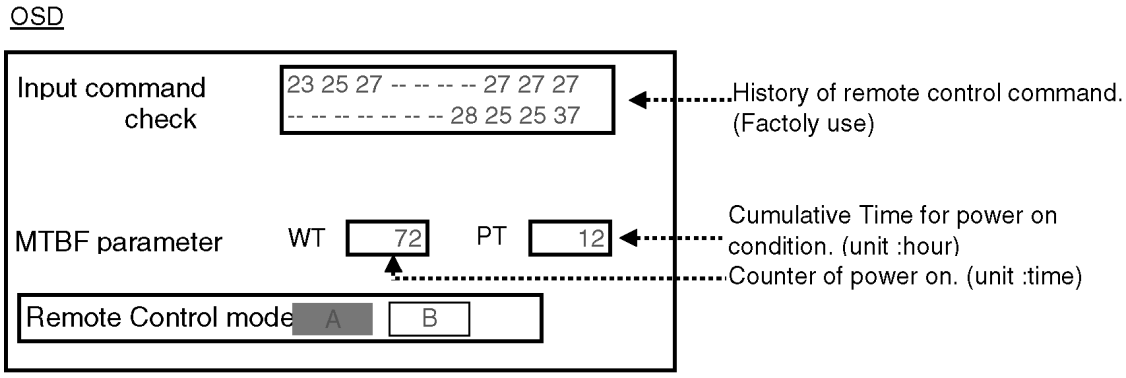


The data is memorized when switch off the main power.

To exit the CD mode, press the **R button** on the remote control.

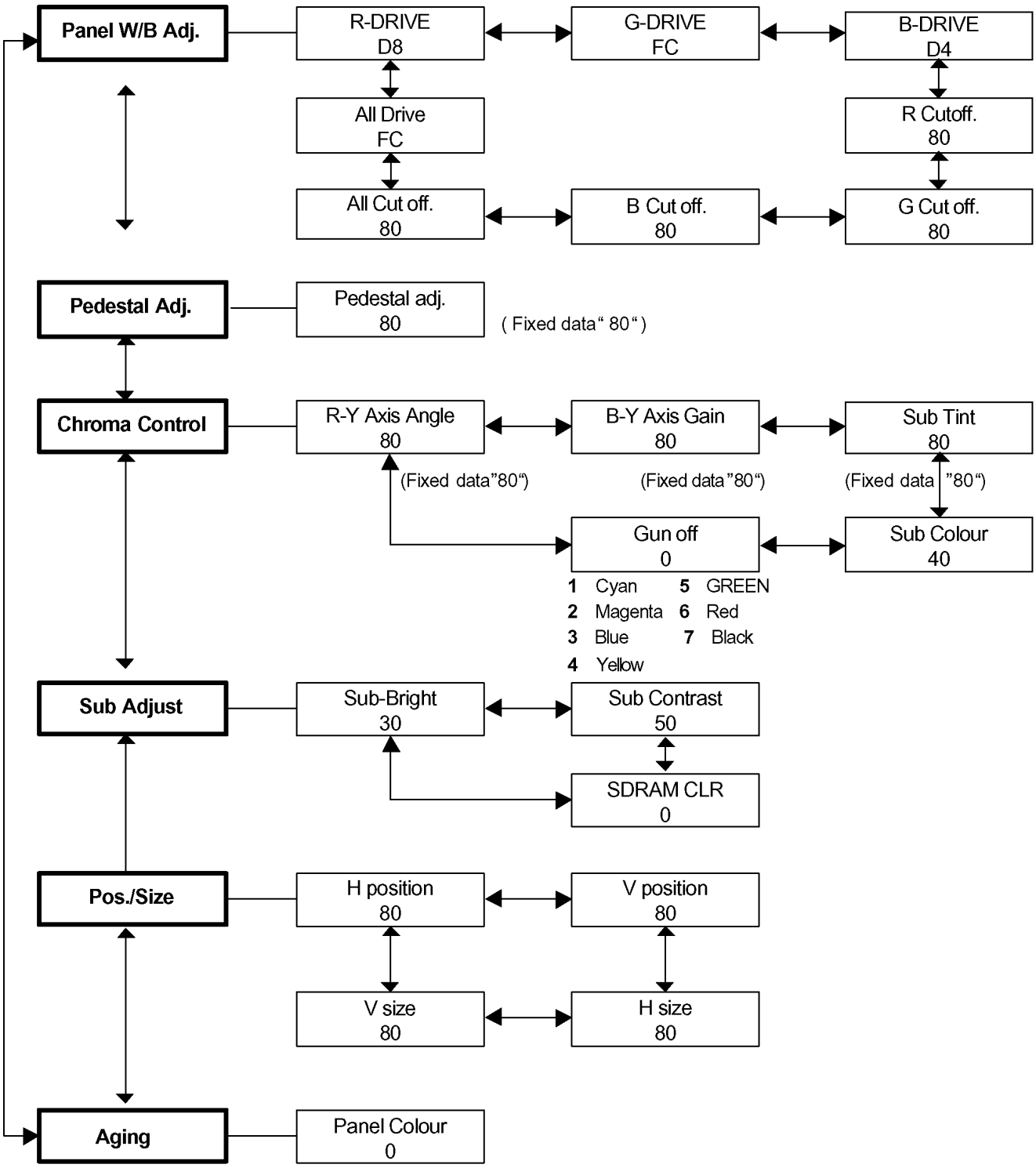
9.1.3. SD mode

Select the SD mode by Up/Down button on the remote control at the front page of CAT mode then press the Action button on the remote control.



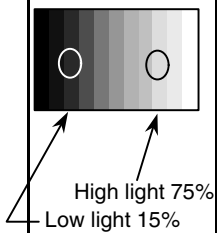
To exit the SD mode, press the **R button** on the remote control.

9.2. IIC mode structure (following items value is sample data.)



10 Alignment

10.1. 625i/625p panel white balance

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	PC (625i) Gray Scale Pattern  	Color Analyzer	Picture: Normal White balance: **Cool** Aspect: 16:9 Component /RGB-in Component	Sub Adjust Sub Bright PANEL W/B G cut off PANEL W/B B cut off R cut off Sub Adjust Sub Bright PANEL W/B G Drive PANEL W/B B Drive R Drive PANEL W/B All Drive PANEL W/B R,G,B cut off	1) Find the nearest area to brightness of 10 cd/m2 as Low light by color sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m2 exactly. 3) Set G cut off to " 80 ". 4) Adjust B and R cut off to set color temperature as shown Fig.-02. 5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m2. 6)Find 75% of white area by color sensor. 7) Set G Drive to " E8 ". 8) Adjust B and R Drive to set color temperature as shown Fig.-02. 9) Repeat procedure 4) to 7) to set both Low light and high light. 10) Set All Drive to "FC". 11) Re-adjust Low light level again. Color Temp. / x / y Cool(Hi) / 0.276 / 0.276 Normal(Mid) / 0.288 / 0.296 Warm(Low) / 0.313 / 0.329 Fig. -02
2			Picture: Normal White balance: **Normal** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
3			Picture: Normal White balance: **Warm** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Warm". 2) Repeat procedure 3) to 11) of Cool mode.
4			Picture: Normal White balance: **Cool** Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change color templature to "Cool". 2)Re-set Sub bright to "30"

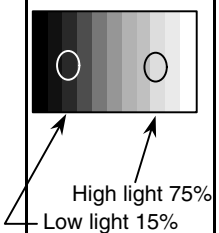
<table>
<tr><th></th><th></th><th>Equipment</th><th>Setting</th><th>Alignment menu</th><th>Procedure</th></tr>
<tr><td>5</td><td>PC (525i)</td><td></td><td>Picture:
Normal
Aspect:
16:9

White balance:
Cool
Normal
Warm</td><td></td><td>1) Write down each color temaparature of R,G,B drive and Cut off data as follows.

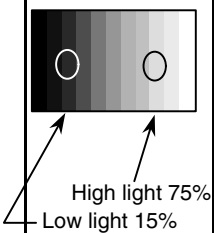
<table><tr><td>White Balance</td><td>Cool</td><td>Normal</td><td>Warm</td></tr><tr><td>R Drive</td><td></td><td></td><td></td></tr><tr><td>G Drive</td><td></td><td></td><td></td></tr><tr><td>B Drive</td><td></td><td></td><td></td></tr><tr><td>R Cut off</td><td></td><td></td><td></td></tr><tr><td>G Cut off</td><td></td><td></td><td></td></tr><tr><td>B Cut off</td><td></td><td></td><td></td></tr></table>
2) Input 525i signal.

3) Copy 625i R,G,B drive and cut off data of each white balance mode to 525i position.</td></tr>
</table>

10.2. PC/RGB panel white balance

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	PC (VGA) Gray Scale Pattern  	Color Analyzer	Picture: Normal White balance: **Cool** Aspect: 16:9 Component /RGB-in RGB	Sub Adjust Sub Bright PANEL W/B G cut off PANEL W/B B cut off R cut off Sub Adjust Sub Bright PANEL W/B G Drive PANEL W/B B Drive R Drive PANEL W/B All Drive PANEL W/B R,G,B cut off	1) Find the nearest area to brightness of 10 cd/m2 as Low light by color sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m2 exactly. 3) Set G cut off to " 80 ". 4) Adjust B and R cut off to set color temperature as shown Fig.-03. 5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m2. 6)Find 75% of white area by color sensor. 7) Set G Drive to " E8 ". 8) Adjust B and R Drive to set color temperature as shown Fig.-03. 9) Repeat item 4) to 7) to set both Low light and high light. 10) Set All Drive to "FC". 11) Re-adjust Low light level again. Color Temp. / x / y Cool(Hi) / 0.276 / 0.276 Normal(Mid) / 0.288 / 0.296 Warm(Low) / 0.313 / 0.329 Fig. -03
2			Picture: Normal White balance: **Normal** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
3			Picture: Normal White balance: **Warm** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Warm". 2) Repeat procedure 3) to 11) of Cool mode.
4			Picture: Normal White balance: **Cool** Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change color templature to "Cool". 2)Re-set Sub bright to "30"

10.3. HD panel white balance

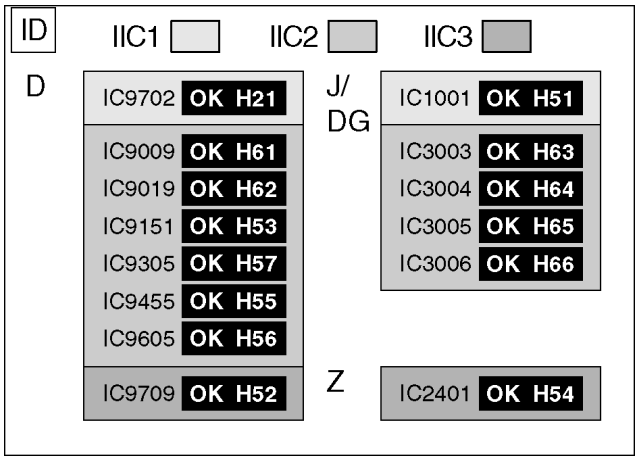
	INPUT	Equipment	Setting	Alignment menu	Procedure
1	PC (HD:720i or 1080i) Gray Scale Pattern  	Color Analyzer	Picture: Normal White balance: **Cool** Aspect: 16:9 Component /RGB-in Component	Sub Adjust Sub Bright PANEL W/B G cut off PANEL W/B B cut off R cut off Sub Adjust Sub Bright PANEL W/B G Drive PANEL W/B B Drive R Drive PANEL W/B All Drive PANEL W/B R,G,B cut off	1) Find the nearest area to brightness of 10 cd/m2 as Low light by color sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m2 exactly. 3) Set G cut off to " 80 ". 4) Adjust B and R cut off to set color temperature as shown Fig.-04. 5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m2. 6)Find 75% of white area by color sensor. 7) Set G Drive to " E8 ". 8) Adjust B and R Drive to set color temperature as shown Fig.-04. 9) Repeat item 4) to 7) to set both Low light and high light. 10) Set All Drive to "FC". 11) Re-adjust Low light level again. Color Temp. / x / y Cool(Hi) / 0.276 / 0.276 Normal(Mid) / 0.288 / 0.296 Warm(Low) / 0.313 / 0.329 Fig. -04
2			Picture: Normal White balance: **Normal** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
3			Picture: Normal White balance: **Warm** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Warm". 2) Repeat procedure 3) to 11) of Cool mode.
4			Picture: Normal White balance: **Cool** Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change color templature to "Cool". 2)Re-set Sub bright to "30"

11 Trouble shooting guide

11.1. Self Check

1. Self-check is used to automatically check the bus line controlled circuit of the Plasma display.
2. To get into the Self-check mode, press the **volume down** button on the customer controls at the front of the set, at the same time pressing the **OFF-TIMER** button on the remote control, and the screen will show :-

If the CCU ports have been checked and found to be incorrect Or not located then " - - " will appear in place of " OK "



11.2. No Power (Power shut down)

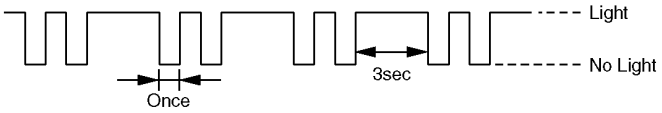
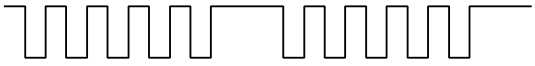
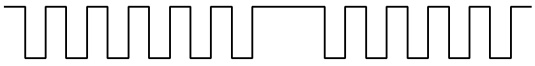
11.2.1. Power LED Blinking timing chart

1. Subject

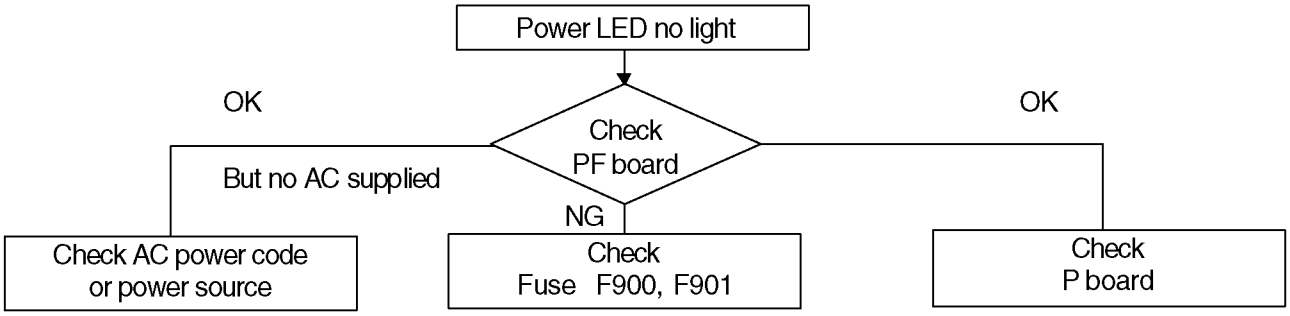
 Information of LED Flashing timing chart.

2. Contents

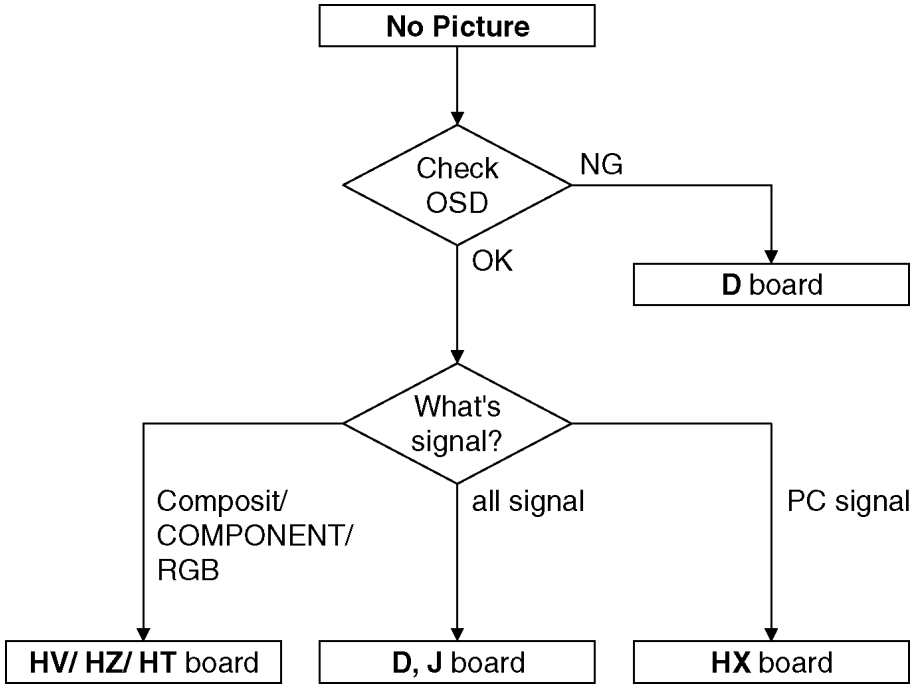
 When an abnormality has occurred the unit, the protection circuit operates and reset to the stand by mode. At this time, the defective block can be identified by the number of blinkes of the Power LED on the front panel of the unit.

Blinking times	Blinking timing	Contents	Board Name
2		Data Driver	SC, SS
3		3.3V SOS	D
4		5V SOS	D, P
5		Power SOS	P
6		FAN Power	FAN motor
7		SCAN Driver	SC, SU, SD
9		SUS Driver	SS

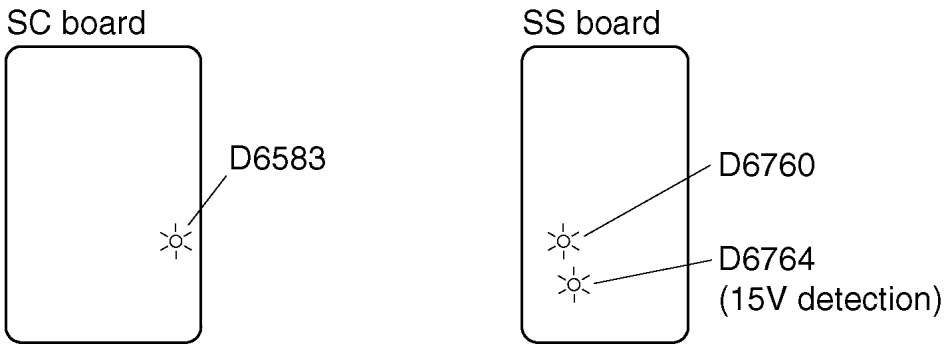
11.2.2. Power LED no light



11.3. No Picture

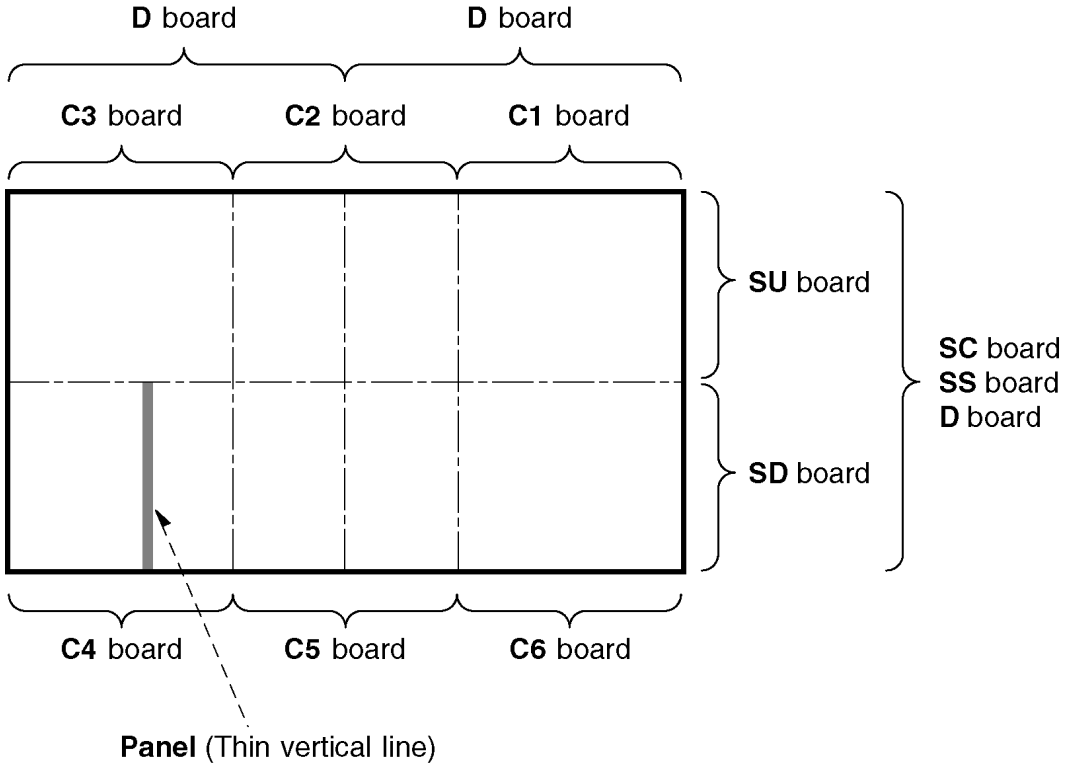


Drive circuits LED indicator



11.4. Local screen failure

Plasma display may have local area failure on the screen. Fig - 1 is the possible defect P.C.B. for each local area.



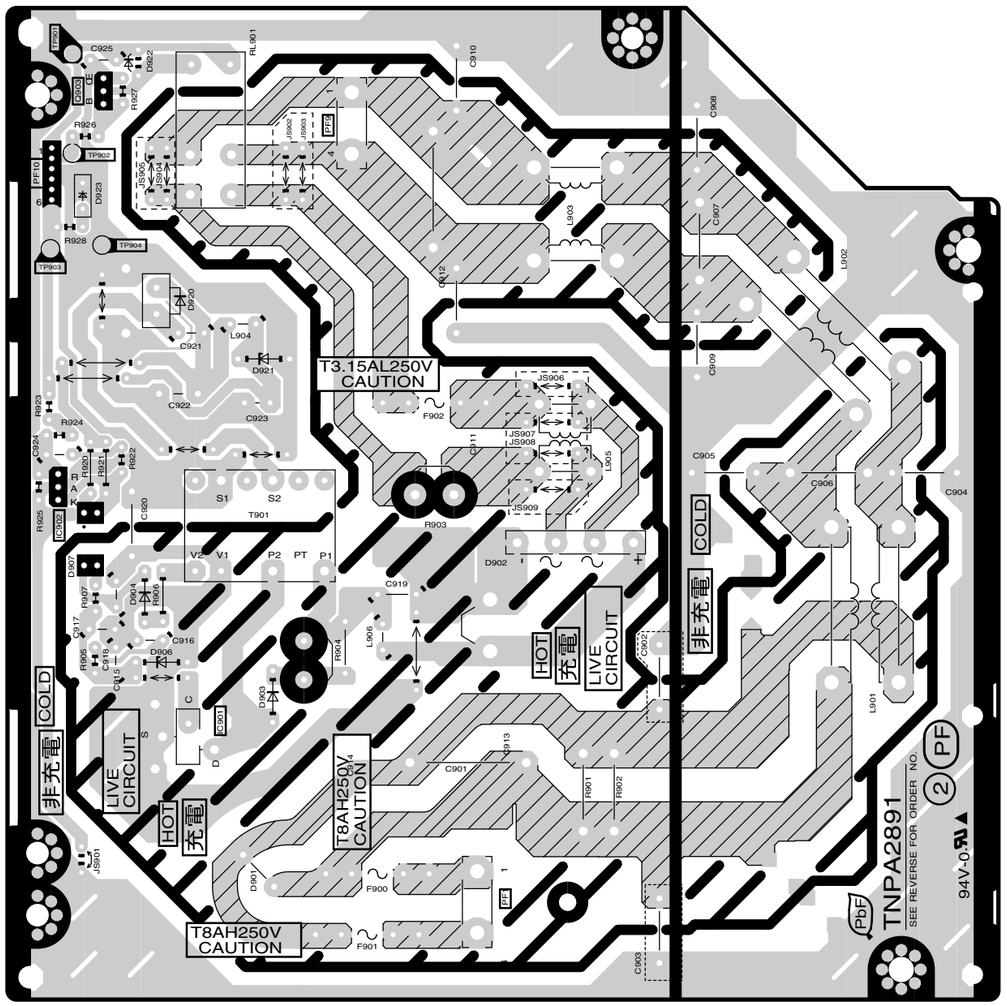
<Local screen failure chart>

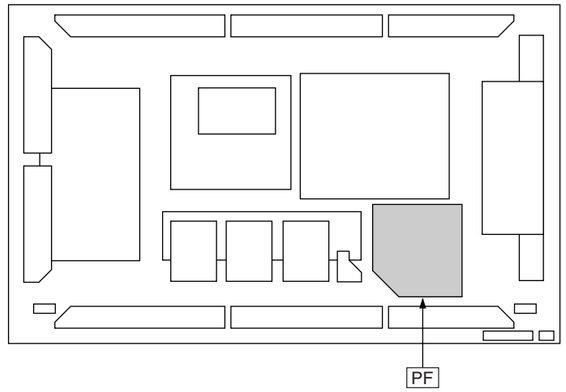
Fig - 1

12 Conductor Views

12.1. PF-Board

PF-BOARD(FOIL SIDE)
TXNPF10QMS





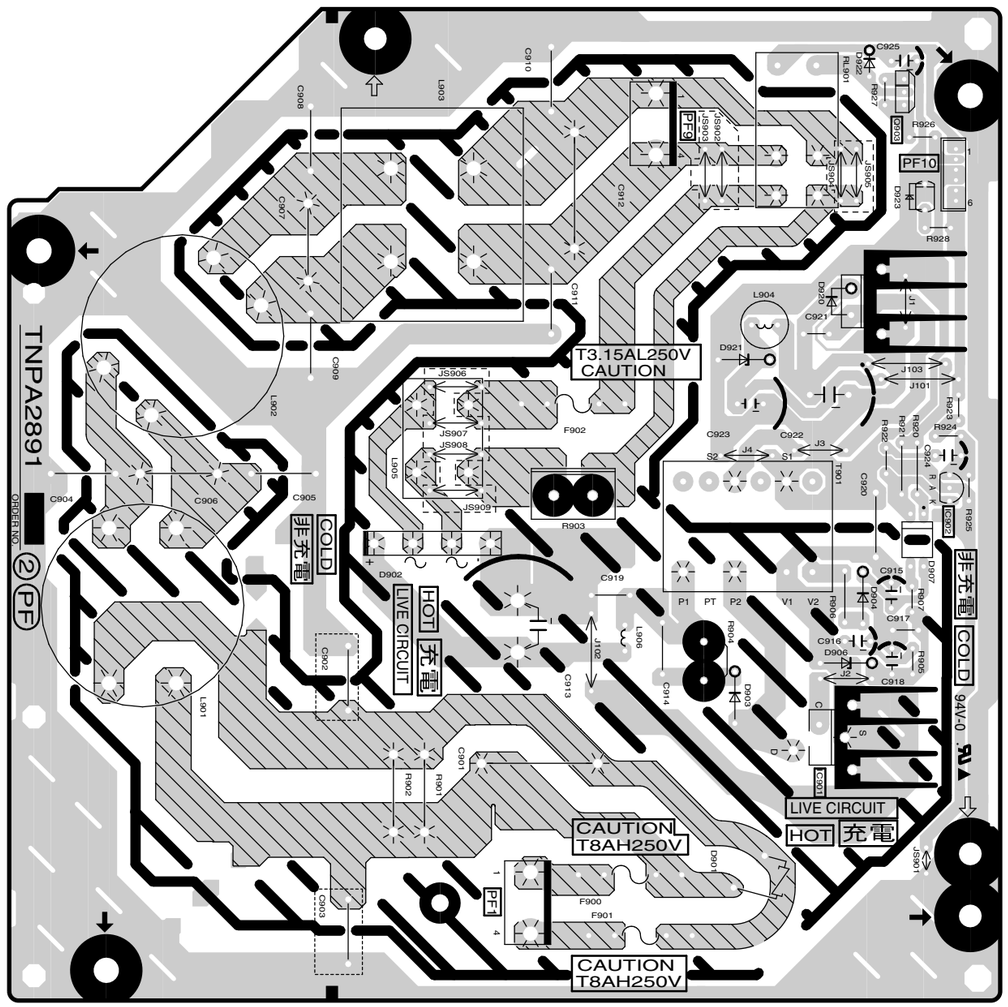
Parts Location

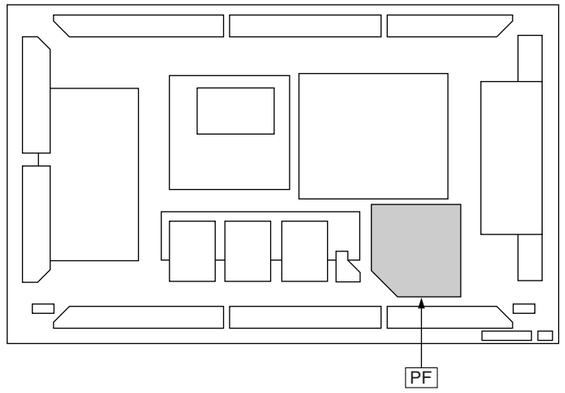
PF-BOARD (FOIL SIDE)			
IC		**TP**	
IC901	B-3	TP9001	A-5
IC902	A-3	TP902	A-5
TRANSISTOR		TP903	A-4
		TP904	A-4
Q903	A-5		

PF-BOARD TXNPF10QMS

PF-BOARD TXNPF10QMS

PF-BOARD(COMPONENT SIDE)
TXNPF10QMS





Parts Location

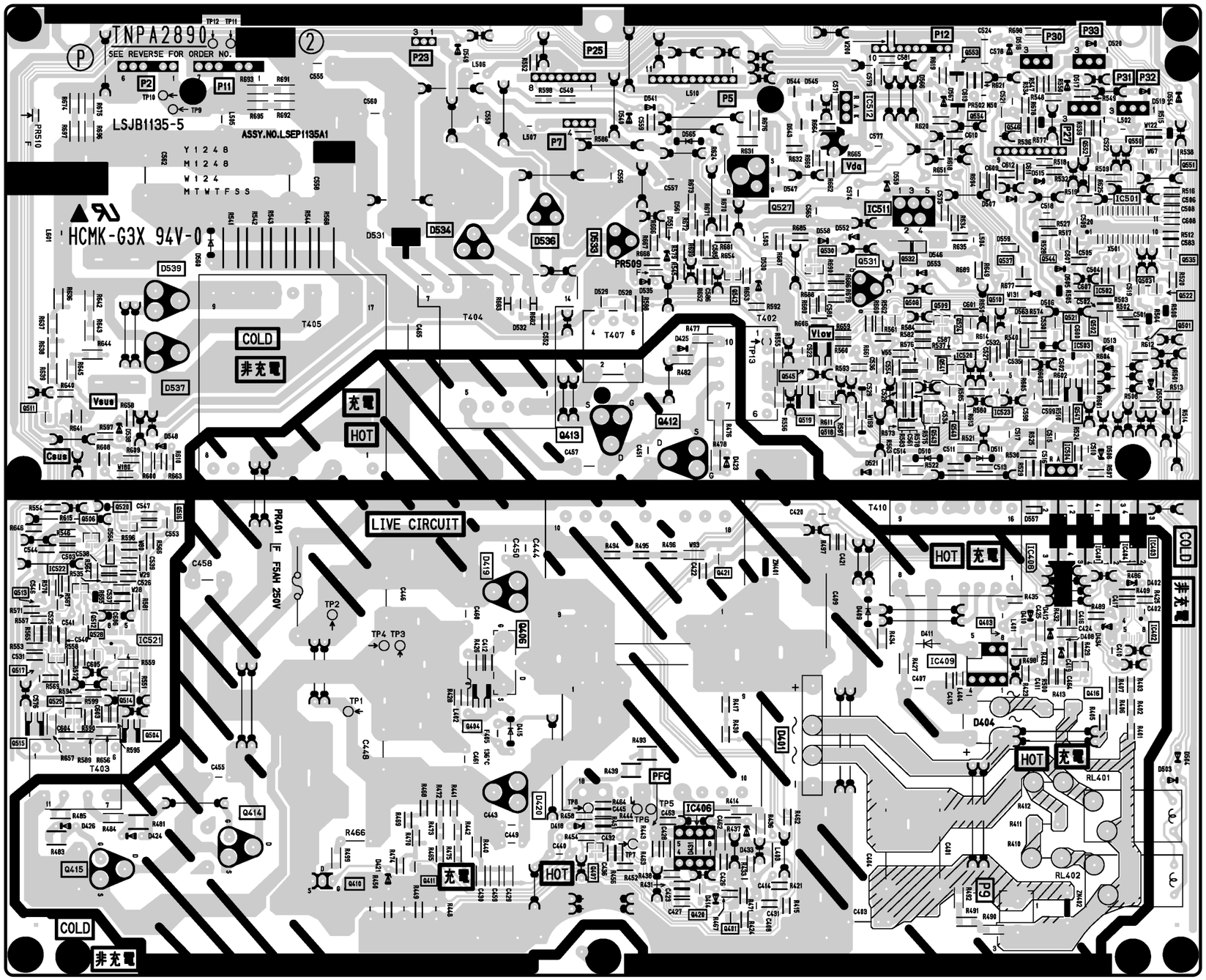
PF-BOARD (COMPONENT SIDE)			
IC		**TRANSISTOR**	
IC901	B-3	Q903	A-5
IC902	A-3		

PF-BOARD TXNPF10QMS

PF-BOARD TXNPF10QMS

12.2. P-Board

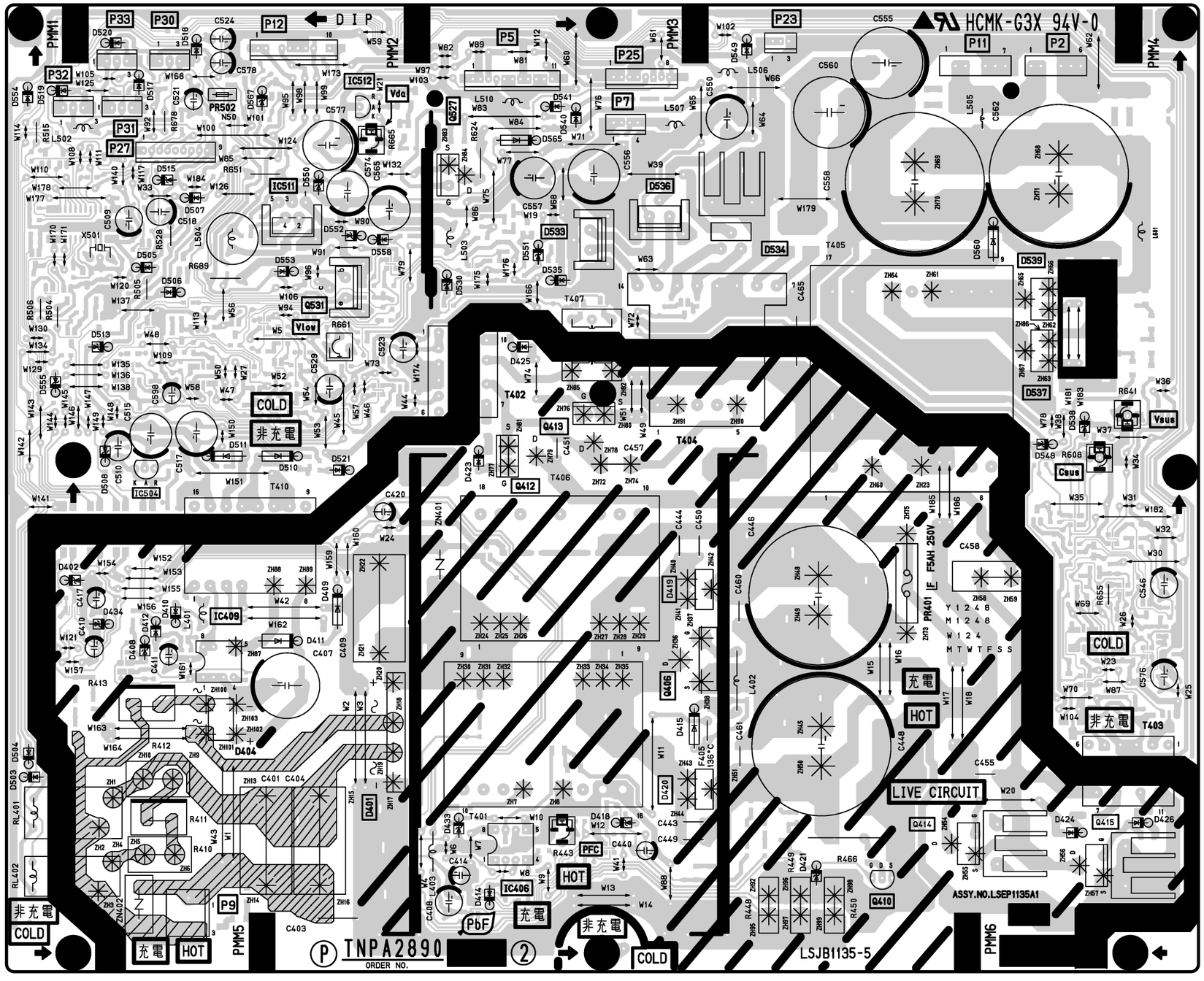
P-BOARD(FOIL SIDE)
TNPA2890



P-BOARD TNPA2890

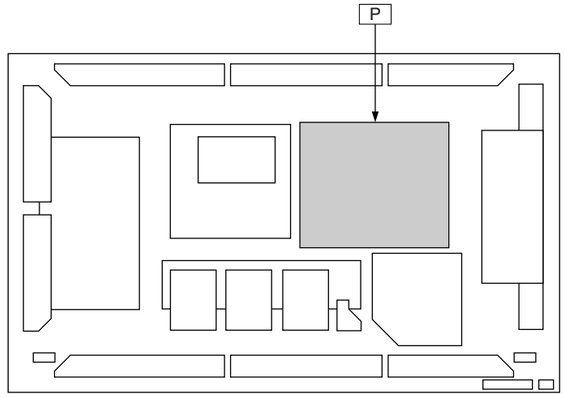
P-BOARD TNPA2890

P-BOARD(COMPONENT SIDE)
TNPA2890



P-BOARD TNPA2890

P-BOARD TNPA2890



Parts Location

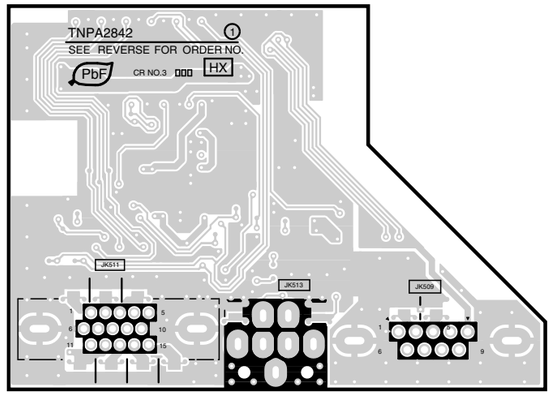
P-BOARD (FOIL SIDE)							
IC		**TRANSISTOR**		Q516	C-3	**TP**	
IC401	H-3	Q401	F-1	Q517	B-3	TP1	D-2
IC402	H-3	Q404	D-2	Q518	F-4	TP2	C-3
IC403	H-3	Q406	E-3	Q519	F-4	TP3	D-3
IC404	H-3	Q407	E-1	Q520	B-3	TP4	D-3
IC406	F-2	Q409	G-3	Q521	H-4	TP5	E-2
IC408	G-3	Q410	D-1	Q522	H-5	TP6	E-2
IC409	G-3	Q411	D-1	Q524	G-4	TP7	E-1
IC501	H-5	Q412	E-4	Q525	B-2	TP8	E-2
IC502	H-5	Q413	E-4	Q527	F-5	TP9	C-6
IC503	H-4	Q414	C-2	Q528	B-3	TP10	B-6
IC504	H-4	Q415	B-1	Q530	F-5	TP11	C-6
IC511	F-5	Q416	H-2	Q531	F-5	TP12	C-6
IC512	F-6	Q420	F-1	Q532	G-5	TP13	F-4
IC520	G-4	Q421	F-3	Q535	H-5		
IC521	B-3	Q501	H-4	Q537	G-5		
IC522	B-3	Q502	H-4	Q540	G-4		
IC523	G-4	Q503	H-5	Q541	G-4		
		Q504	B-2	Q542	F-5		
		Q506	B-3	Q544	G-5		
		Q508	G-5	Q545	F-4		
		Q509	G-5	Q546	G-6		
		Q510	G-5	Q547	H-4		
		Q511	B-4	Q549	G-4		
		Q512	B-3	Q550	H-6		
		Q513	B-3	Q551	H-5		
		Q514	B-2	Q552	H-5		
		Q515	B-2	Q553	G-6		
				Q554	G-6		

Parts Location

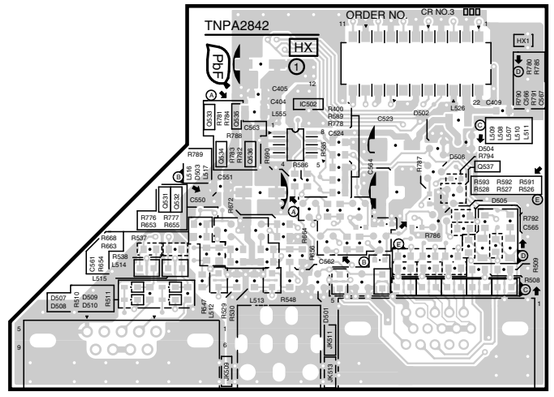
P-BOARD (COMPONENT SIDE)			
IC		**TRANSISTOR**	
IC406	D-1	Q406	E-2
IC409	C-3	Q410	G-1
IC504	B-4	Q412	E-4
IC511	C-5	Q413	E-4
IC512	D-6	Q414	G-2
		Q415	H-2
		Q527	D-6
		Q531	C-5

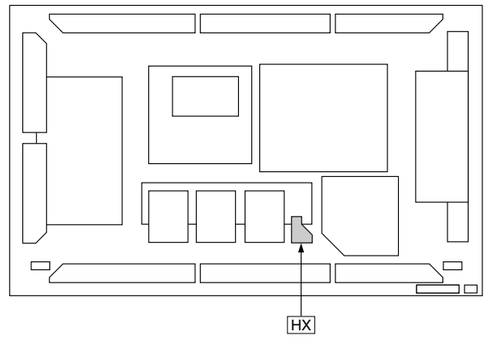
12.3. HX-Board

HX-BOARD(FOIL SIDE)
TZTNP01SCSH



HX-BOARD(COMPONENT SIDE)
TZTNP01SCSH





Parts Location

HX-BOARD			
IC		**TRANSISTOR**	
IC3502	E-4	Q3531	D-4
		Q3532	D-4
		Q3533	E-4
		Q3534	E-4
		Q3535	E-4
		Q3536	E-4
		Q3537	F-4

HX-BOARD TZTNP01SCSH

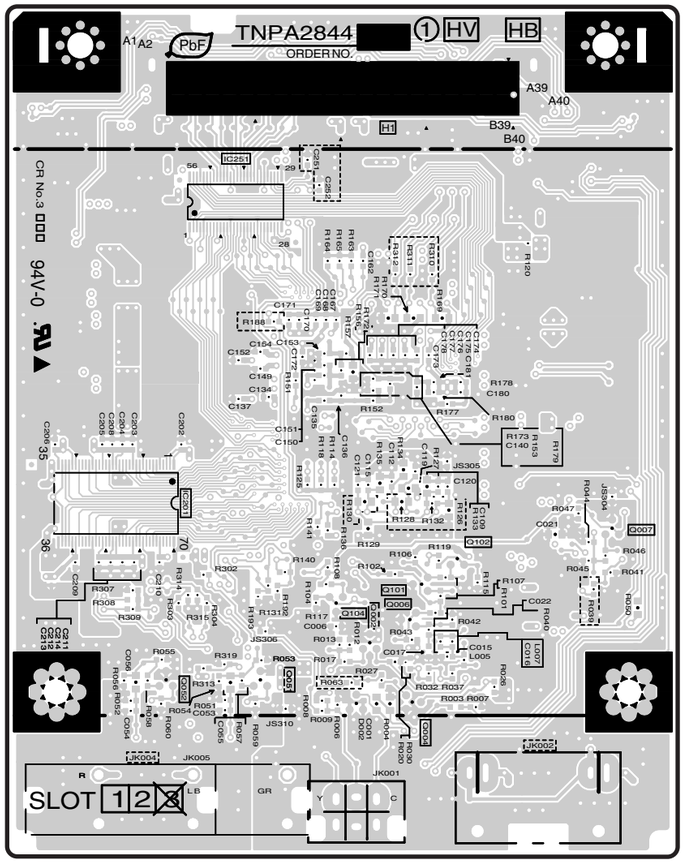
HX-BOARD TZTNP01SCSH

12.4. HV-Board

Parts Location

HV-BOARD			
IC		TRANSISTOR	
IC3201	A-3	Q3002	B-2
IC3251	B-4	Q3004	B-2
		Q3006	B-2
		Q3007	C-2
		Q3051	B-2
		Q3052	A-2
		Q3101	B-2
		Q3102	C-2
		Q3104	B-2

RTB031
HV-BOARD(FOIL SIDE)
TXNHV10QWS

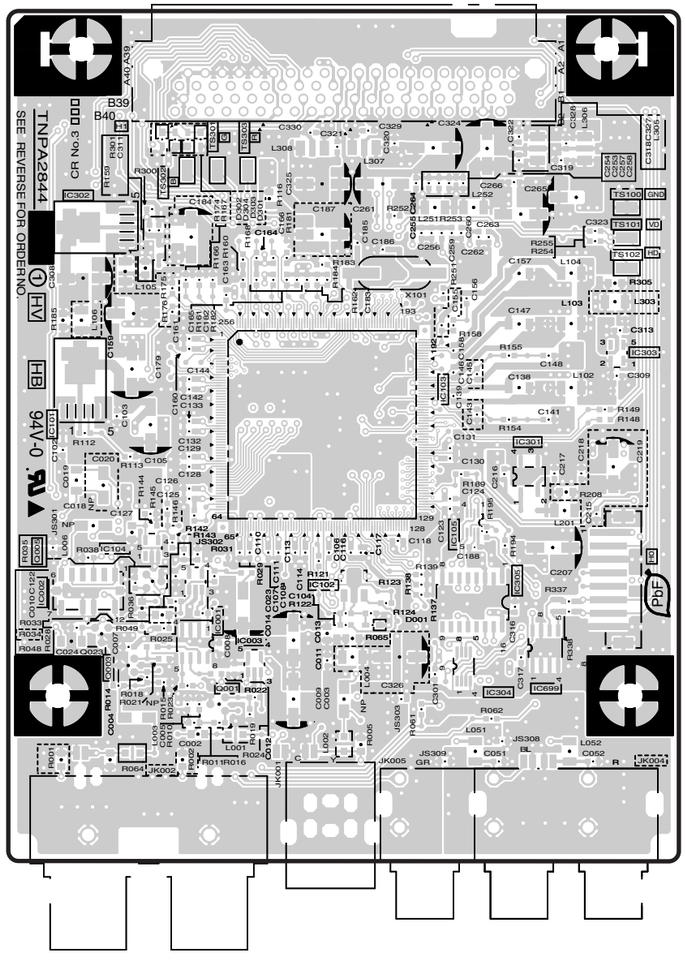


HV-BOARD TXNHV10QWS

Parts Location

HV-BOARD			
IC		TRANSISTOR	
IC3001	G-2	Q3001	G-2
IC3002	F-2	Q3003	F-2
IC3003	G-2	Q3005	F-2
IC3101	F-3		
IC3102	G-2		
IC3103	G-3		
IC3104	F-2		
IC3105	H-3		
IC3301	H-3		
IC3302	F-4		
IC3303	H-3		
IC3304	H-2		
IC3305	H-2		
IC3699	H-2		

RTB031
HV-BOARD(COMPONENT SIDE)
TXNHV10QWS



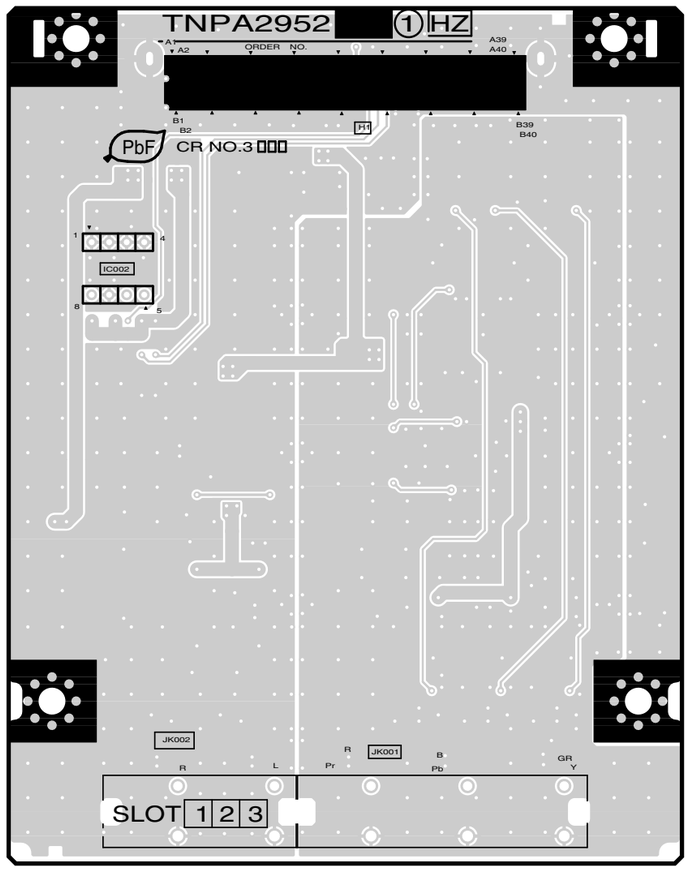
HV-BOARD TXNHV10QWS

12.5. HZ-Board

Parts Location

HZ-BOARD	
IC	
IC3002	A-3

RTB033
HZ-BOARD(FOIL SIDE)
TXNHZ10RCS

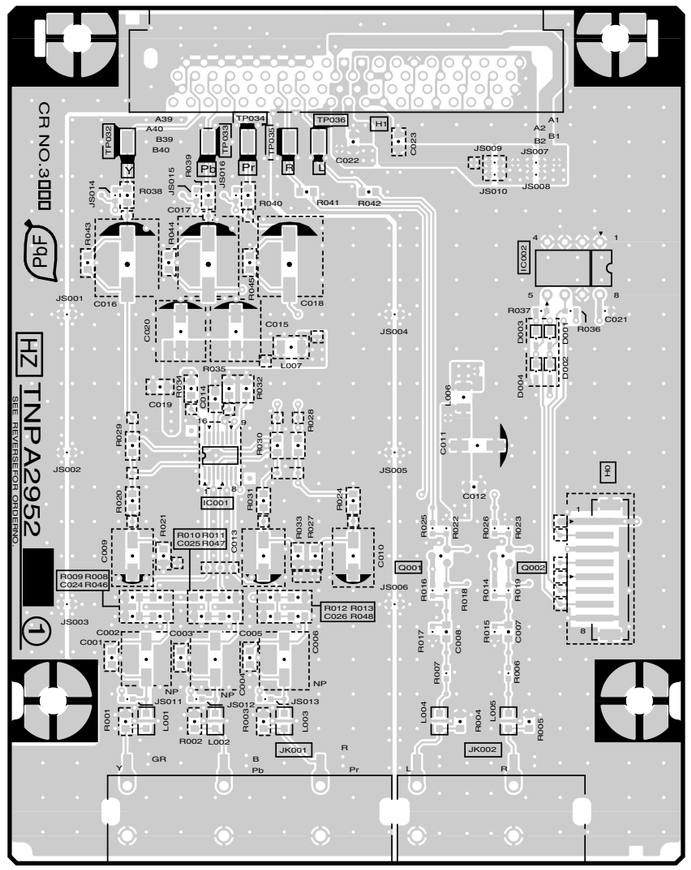


HZ-BOARD TXNHZ10RCS

Parts Location

HZ-BOARD			
IC		**TP**	
IC3001	G-3	TP032	F-4
IC3002	H-3	TP033	G-4
TRANSISTOR		TP034	G-4
		TP035	G-4
Q3001	G-2	TP036	G-4
Q3002	H-2		

RTB033
HZ-BOARD(COMPONENT SIDE)
TXNHZ10RCS



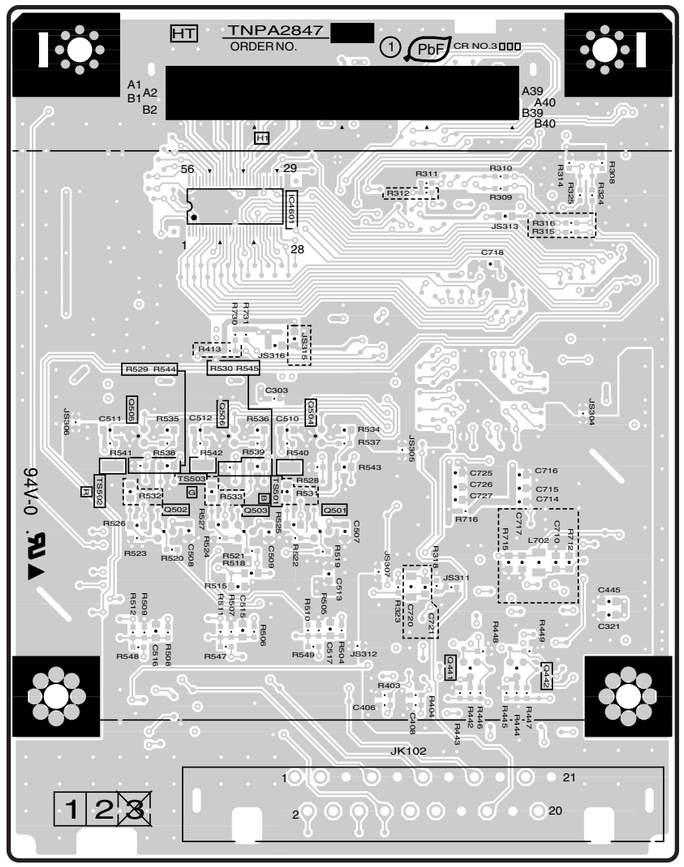
HZ-BOARD TXNHZ10RCS

12.6. HT-Board

Parts Location

HT-BOARD			
IC		TRANSISTOR	
IC4601	B-4	Q3441	C-2
		Q3442	C-2
		Q3501	B-2
		Q3502	A-2
		Q3503	B-2
		Q3504	B-3
		Q3505	A-3
		Q3506	B-3

RTB032
HT-BOARD(FOIL SIDE)
TXNHT10QYS

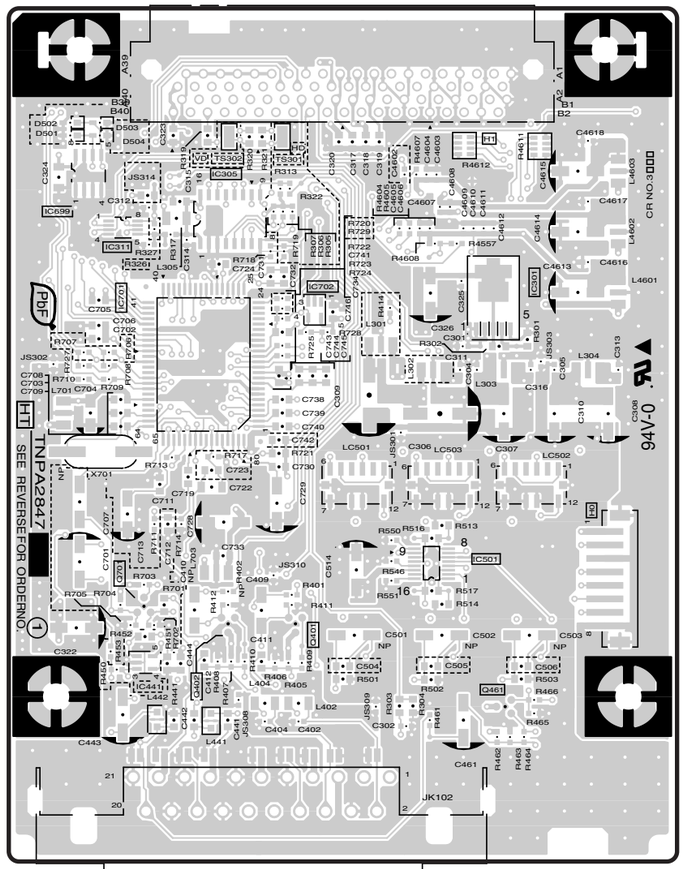


HT-BOARD TXNHT10QYS

Parts Location

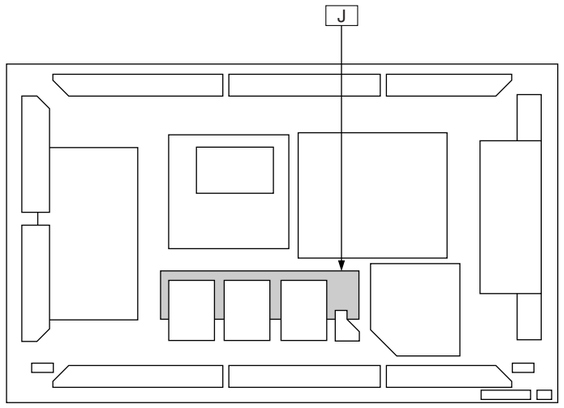
HT-BOARD			
IC		TRANSISTOR	
IC3301	H-3	Q3401	G-2
IC3305	G-4	Q3402	G-2
IC3311	F-3	Q3461	H-2
IC3441	F-2	Q3701	F-2
IC3501	G-2		
IC3699	F-4		
IC3701	F-3		
IC3702	G-3		

RTB032
HT-BOARD(COMPONENT SIDE)
TXNHT10QYS



HT-BOARD TXNHT10QYS

12.7. J-Board



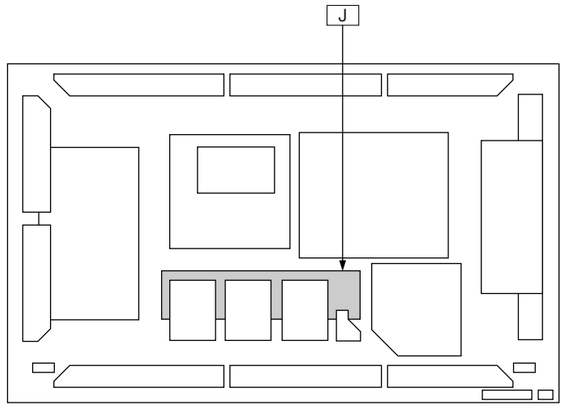
Parts Location

J-BOARD (FOIL SIDE)			
IC		**TRANSISTOR**	
IC8003	I-2	Q3001	G-3
IC8004	F-2	Q3002	D-2
		Q3003	D-2
		Q3101	H-2
		Q3102	H-2
		Q3103	H-1
		Q3104	H-2
		Q3105	H-2
		Q3106	H-2
		Q8001	G-2
		Q8002	I-2

J-BOARD (FOIL SIDE)
TNPA2826

J-BOARD TNPA2826

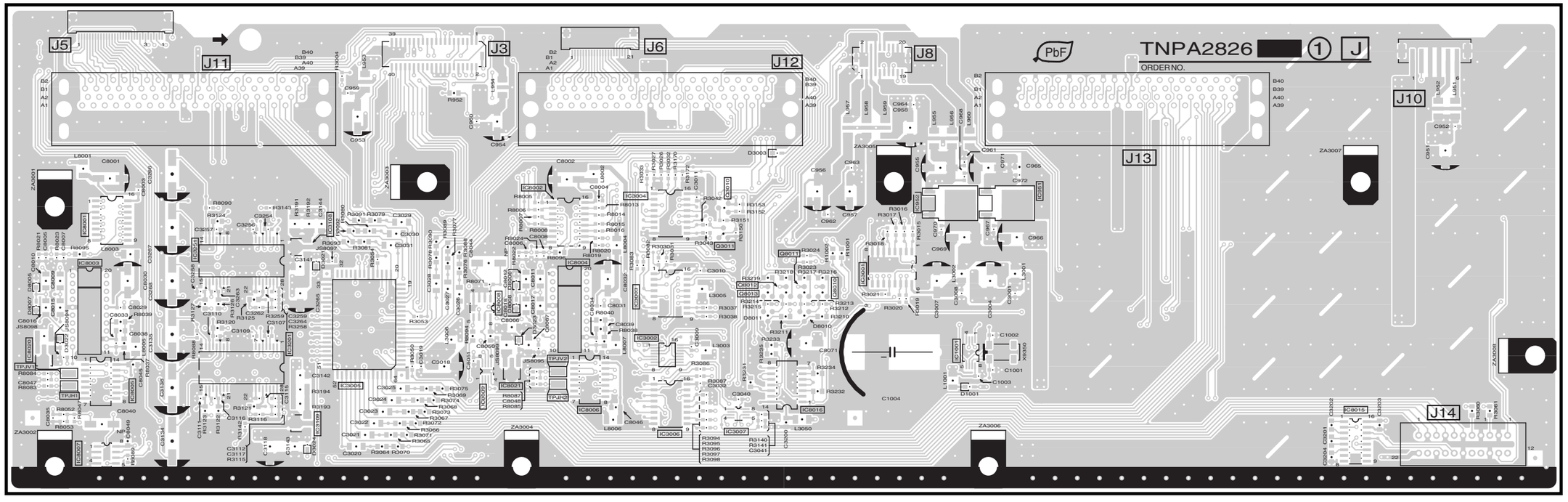
J-BOARD TNPA2826



Parts Location

J-BOARD (COMPONENT SIDE)			
IC		**TRANSISTOR**	
IC1001	F-2	Q3010	E-3
IC3001	F-2	Q3011	E-3
IC3002	D-2	Q8010	E-2
IC3003	D-2	Q8011	E-2
IC3004	D-3	Q8012	E-2
IC3005	C-2	Q8013	E-2
IC3006	D-2	**TP**	
IC3007	E-1	TPJH1	A-2
IC3108	B-2	TPJH2	D-2
IC3109	B-1	TPJV1	A-2
IC3201	B-2	TPJV2	D-2
IC3251	B-2		
IC8001	A-3		
IC8002	D-3		
IC8003	A-2		
IC8004	D-2		
IC8005	A-2		
IC8006	D-2		
IC8007	A-1		
IC8008	C-2		
IC8009	C-2		
IC8015	H-1		
IC8016	E-2		
IC8020	A-2		
IC8021	D-2		
IC951	F-3		
IC952	F-3		

J-BOARD(COMPONENT SIDE)
TNPA2826

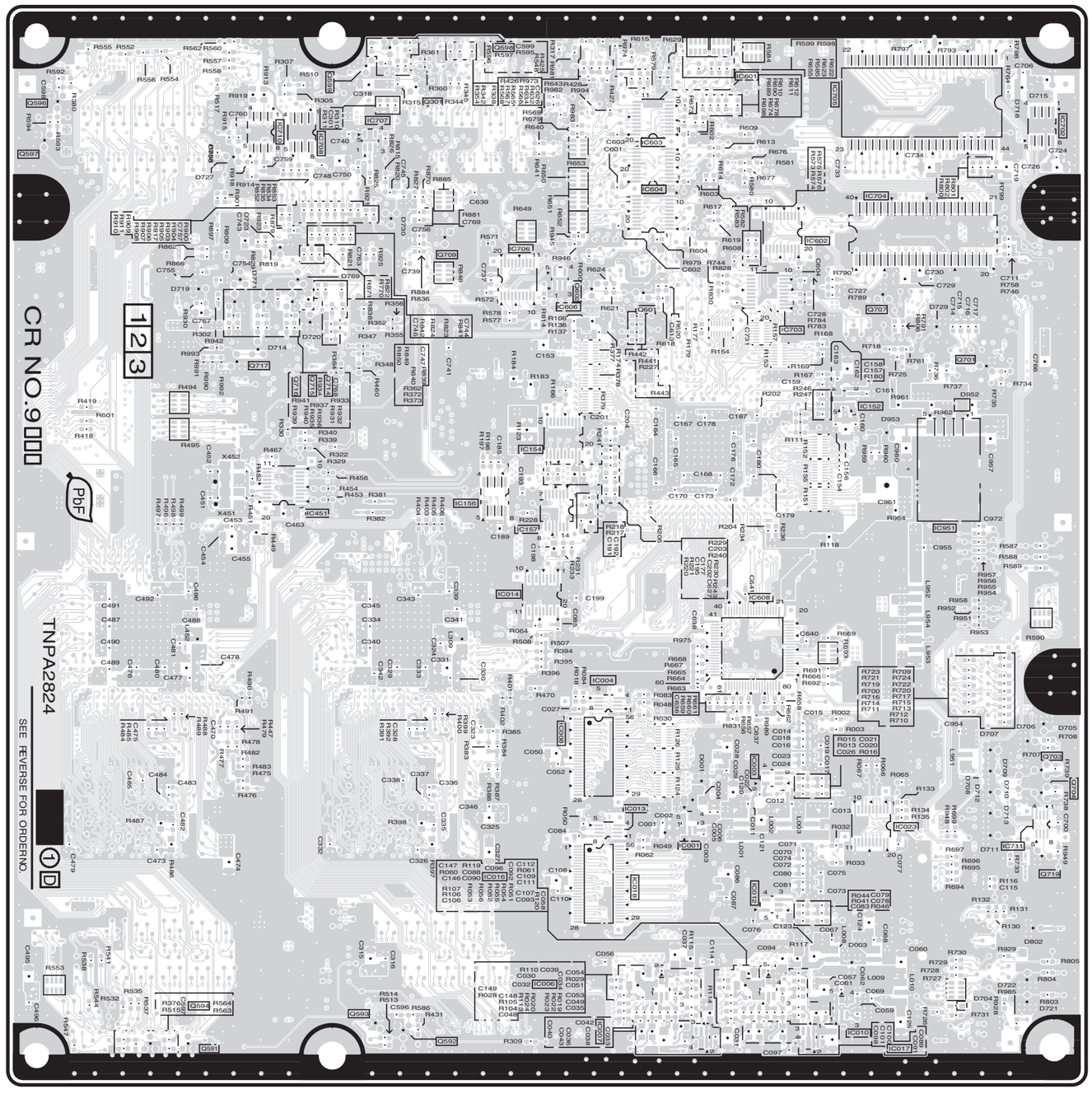


J-BOARD TNPA2826

J-BOARD TNPA2826

12.8. D-Board

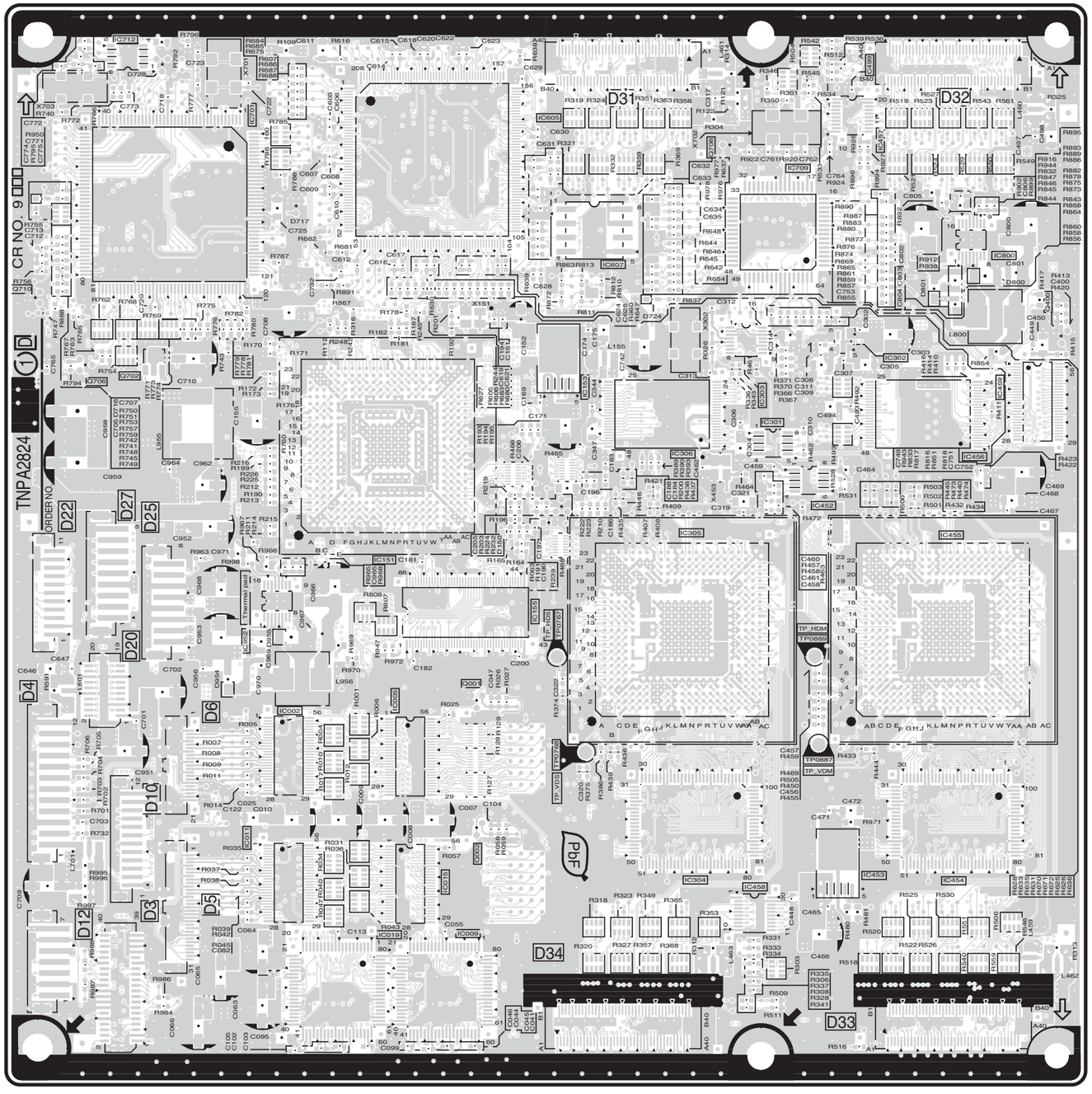
D-BOARD(FOIL SIDE)
TZTNP02SCSH/TZTNP01SCSC



D-BOARD TZTNP02SCSH/TZTNP01SCSC

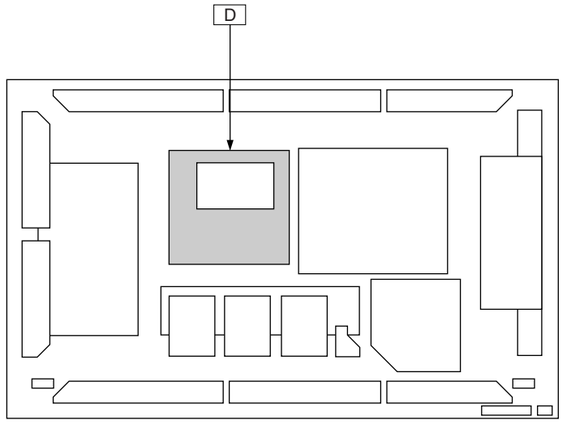
D-BOARD TZTNP02SCSH/TZTNP01SCSC

D-BOARD(COMPONENT SIDE)
TZTNP02SCSH/TZTNP01SCSC



D-BOARD TZTNP02SCSH/TZTNP01SCSC

D-BOARD TZTNP02SCSH/TZTNP01SCSC



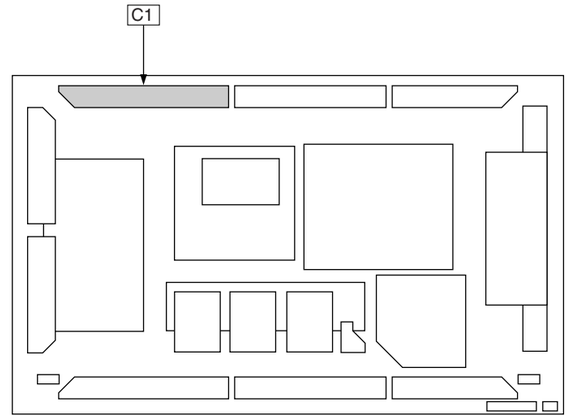
Parts Location

D-BOARD (FOIL SIDE)					
IC		IC603	D-6	**TRANSISTOR**	
IC001	D-2	IC604	D-5	Q301	C-6
IC003	E-2	IC606	D-5	Q591	B-1
IC004	D-3	IC608	E-3	Q592	C-1
IC006	D-1	IC702	F-6	Q593	C-1
IC007	D-1	IC703	E-5	Q594	B-1
IC008	D-3	IC704	E-5	Q596	A-6
IC010	E-1	IC705	E-6	Q597	A-6
IC012	E-2	IC706	C-5	Q598	C-6
IC013	D-2	IC707	C-6	Q599	C-6
IC014	C-3	IC708	B-6	Q601	D-5
IC016	C-2	IC710	B-6	Q602	D-5
IC017	E-1	IC711	F-2	Q701	F-4
IC018	D-2	IC951	F-4	Q703	F-3
IC023	E-2			Q704	F-2
IC152	E-4			Q707	E-5
IC154	C-4			Q709	C-5
IC156	C-4			Q714	B-4
IC157	C-4			Q715	B-4
IC451	B-4			Q716	B-4
IC601	D-6			Q717	B-4
IC602	E-5			Q719	F-2

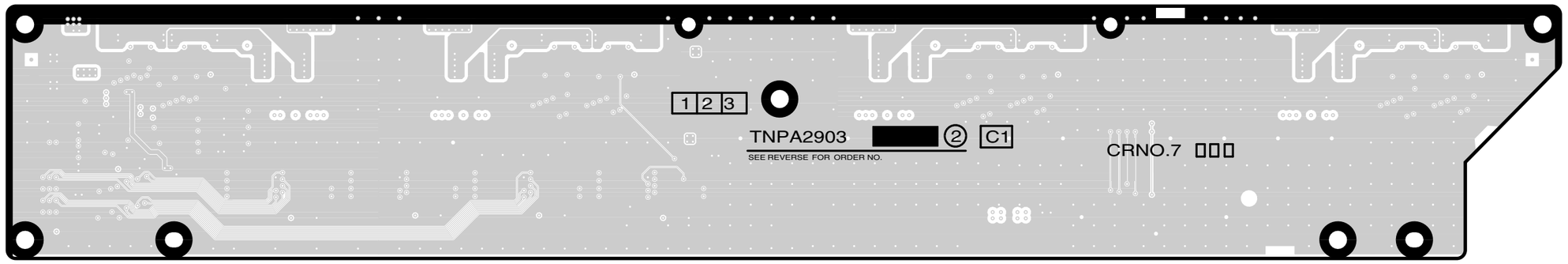
Parts Location

D-BOARD (COMPONENT SIDE)					
IC		IC458	E-2	**TRANSISTOR**	
IC002	B-3	IC459	F-4	Q001	C-3
IC005	C-3	IC605	C-6	Q002	C-2
IC009	C-2	IC607	D-5	Q400	F-5
IC011	B-2	IC701	B-6	Q702	A-4
IC015	C-2	IC709	E-5	Q706	A-4
IC019	C-2	IC712	A-6	Q708	D-6
IC151	C-4	IC800	F-5	Q710	A-5
IC153	D-4	IC952	B-3	**TP**	
IC155	C-3			TP0767	D-3
IC301	E-4			TP0768	D-3
IC302	E-4			TP0887	E-3
IC303	E-4			TP0889	E-3
IC304	D-2				
IC305	D-4				
IC306	D-4				
IC452	E-4				
IC453	E-2				
IC454	F-2				
IC455	F-3				
IC456	F-4				
IC457	E-6				

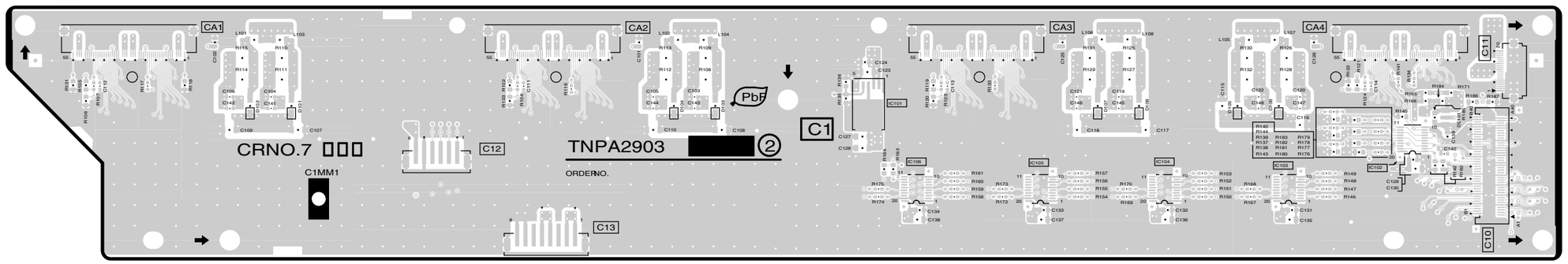
12.9. C1-Board



C1-BOARD(FOIL SIDE)
TNPA2903



C1-BOARD(COMPONENT SIDE)
TNPA2903

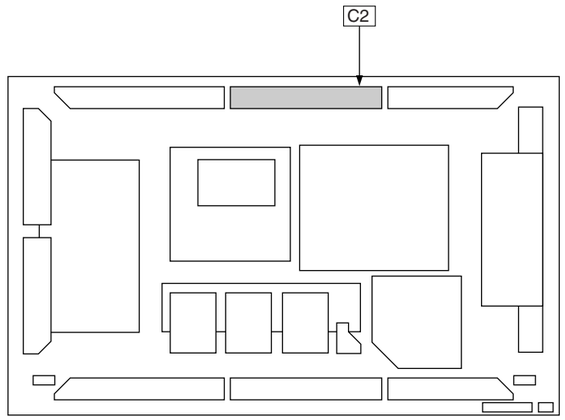


C1-BOARD TNPA2903

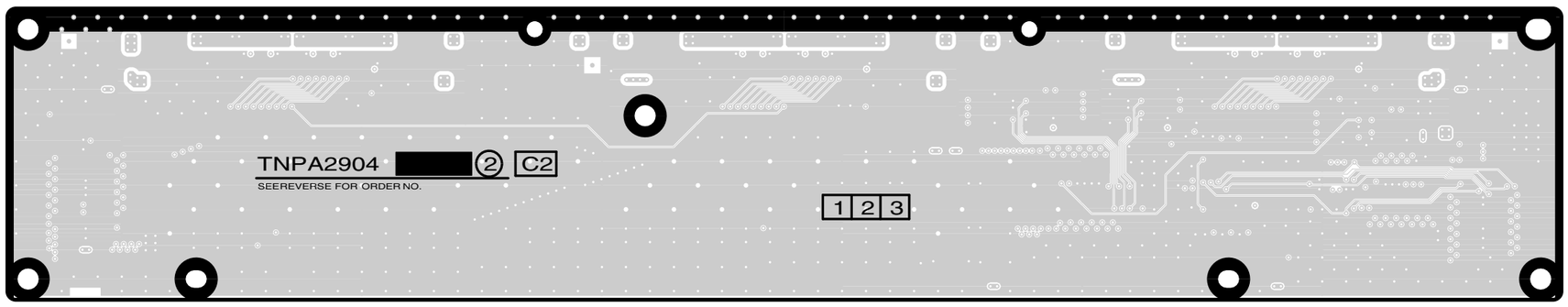
C1-BOARD TNPA2903

A B C D E F G H I

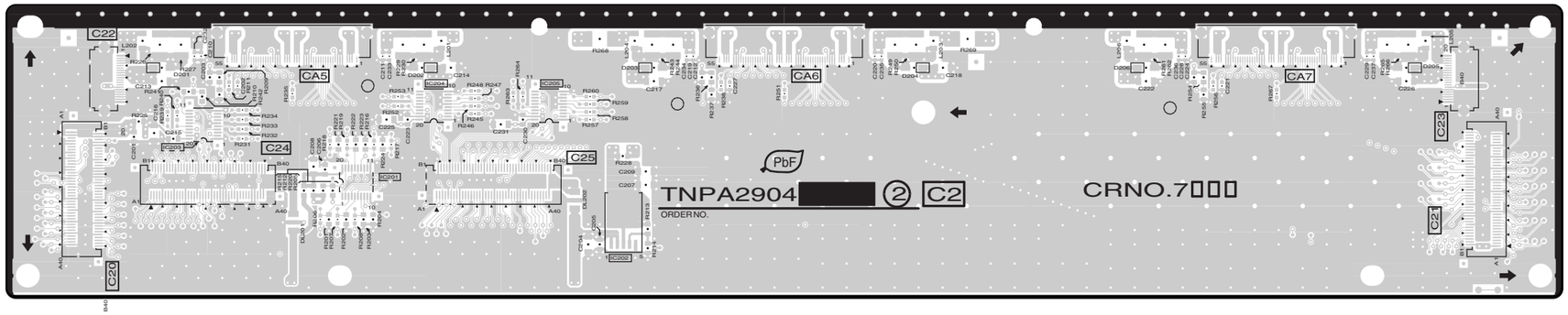
12.10. C2-Board



C2-BOARD(FOIL SIDE)
TNPA2904



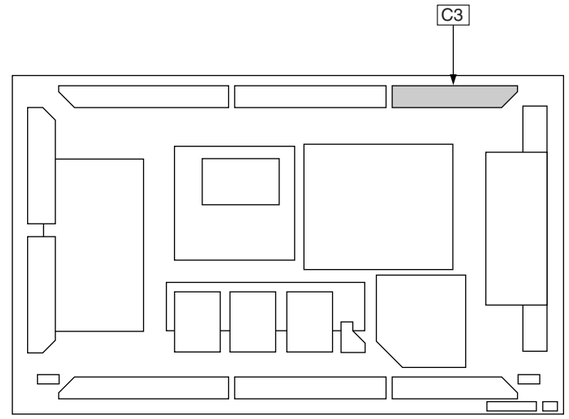
C2-BOARD(COMPONENT SIDE)
TNPA2904



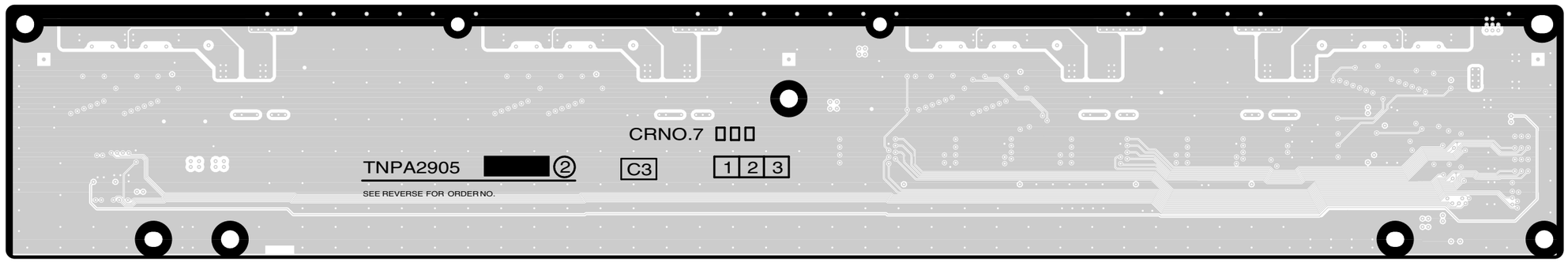
C2-BOARD TNPA2904

C2-BOARD TNPA2904

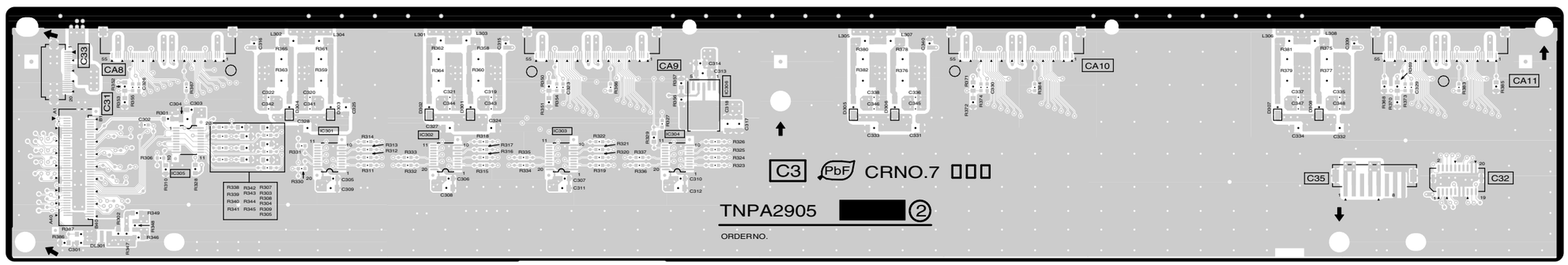
12.11. C3-Board



C3-BOARD(FOIL SIDE)
TNPA2905



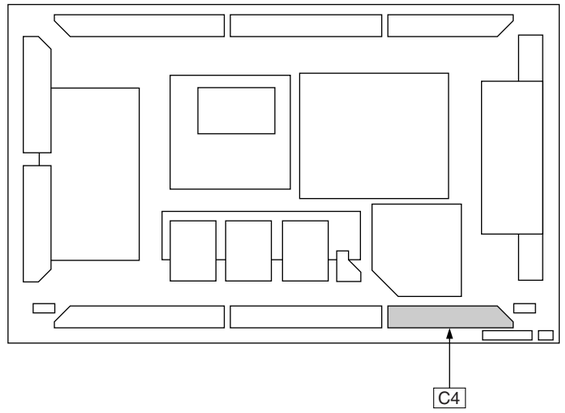
C3-BOARD(COMPONENT SIDE)
TNPA2905



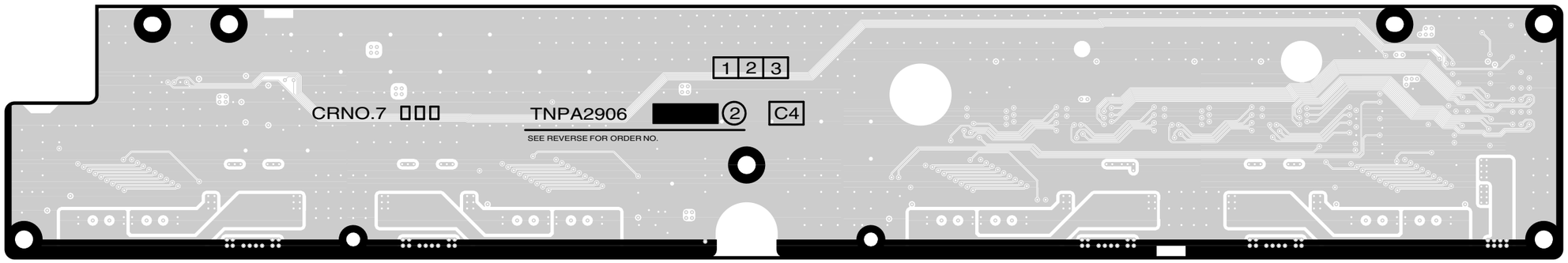
C3-BOARD TNPA2905

C3-BOARD TNPA2905

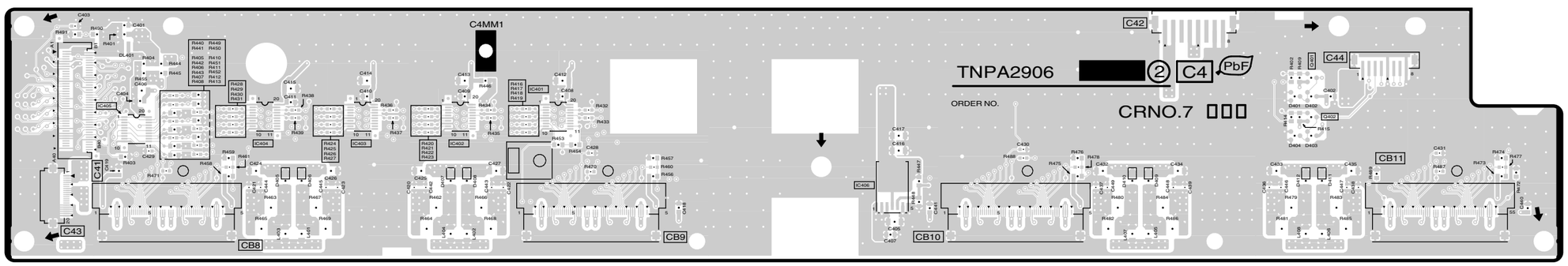
12.12. C4-Board



C4-BOARD(FOIL SIDE)
TNPA2906



C4-BOARD(COMPONENT SIDE)
TNPA2906

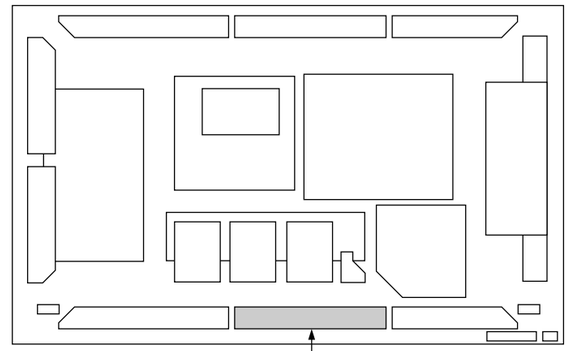


C4-BOARD TNPA2906

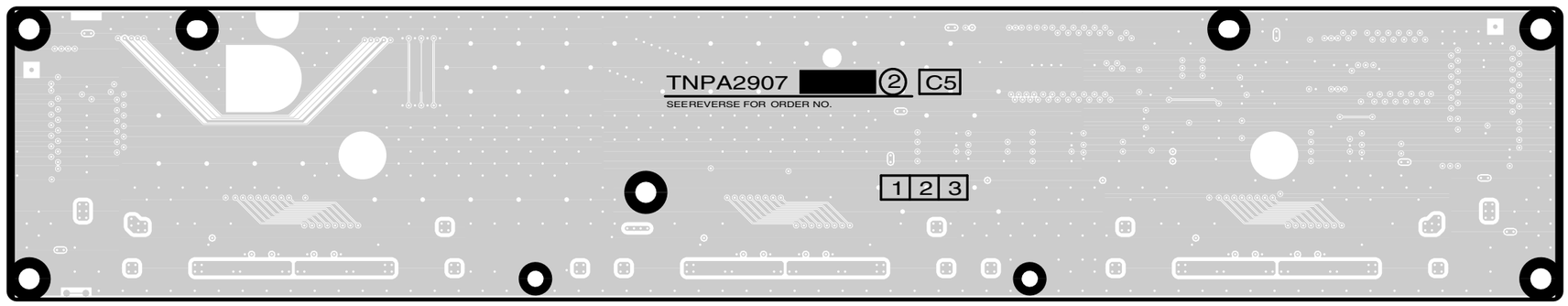
C4-BOARD TNPA2906

A B C D E F G H I

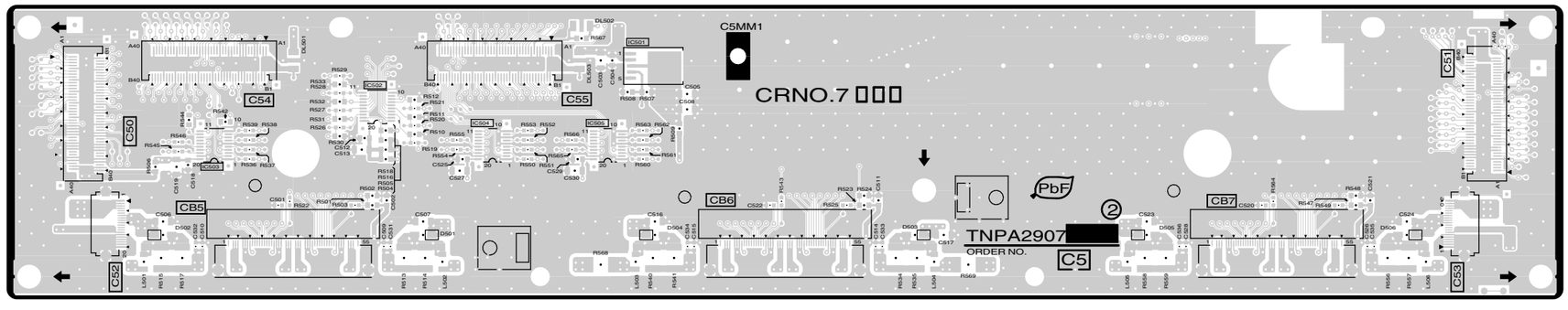
12.13. C5-Board



C5-BOARD(FOIL SIDE)
TNPA2907



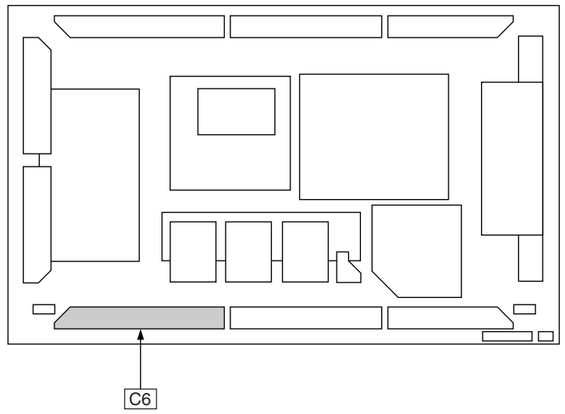
C5-BOARD(COMPONENT SIDE)
TNPA2907



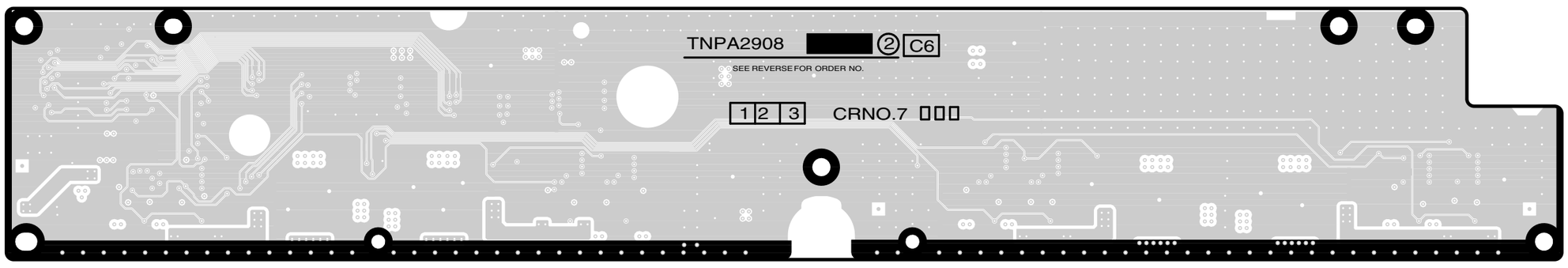
C5-BOARD TNPA2907

C5-BOARD TNPA2907

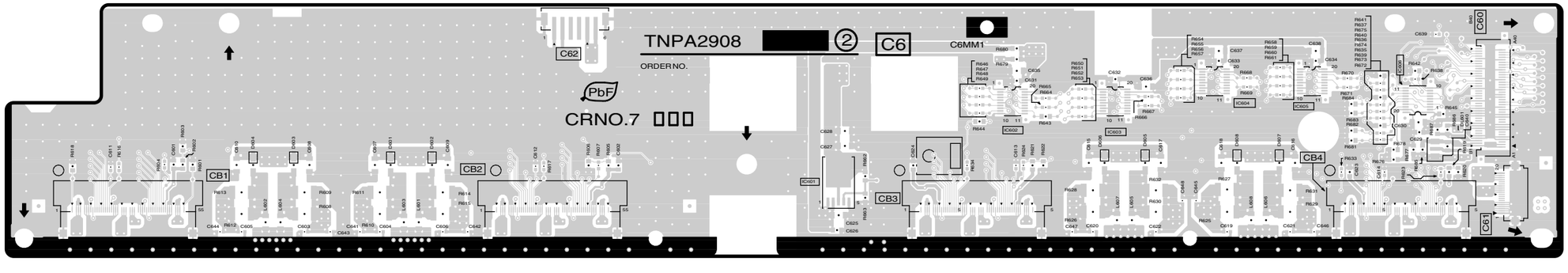
12.14. C6-Board



C6-BOARD(FOIL SIDE)
TNPA2908



C6-BOARD(COMPONENT SIDE)
TNPA2908

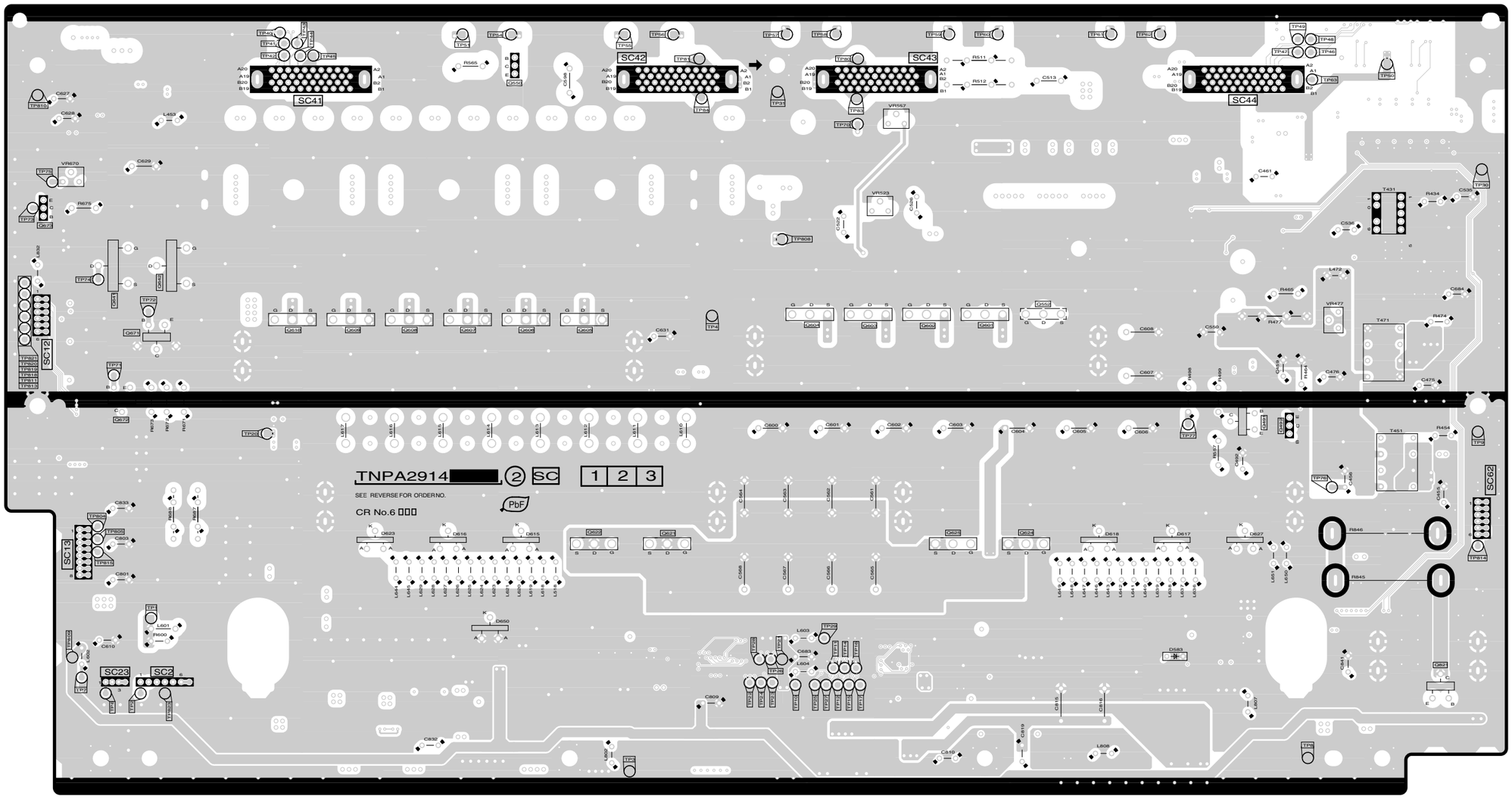


C6-BOARD TNPA2908

C6-BOARD TNPA2908

12.15. SC-Board

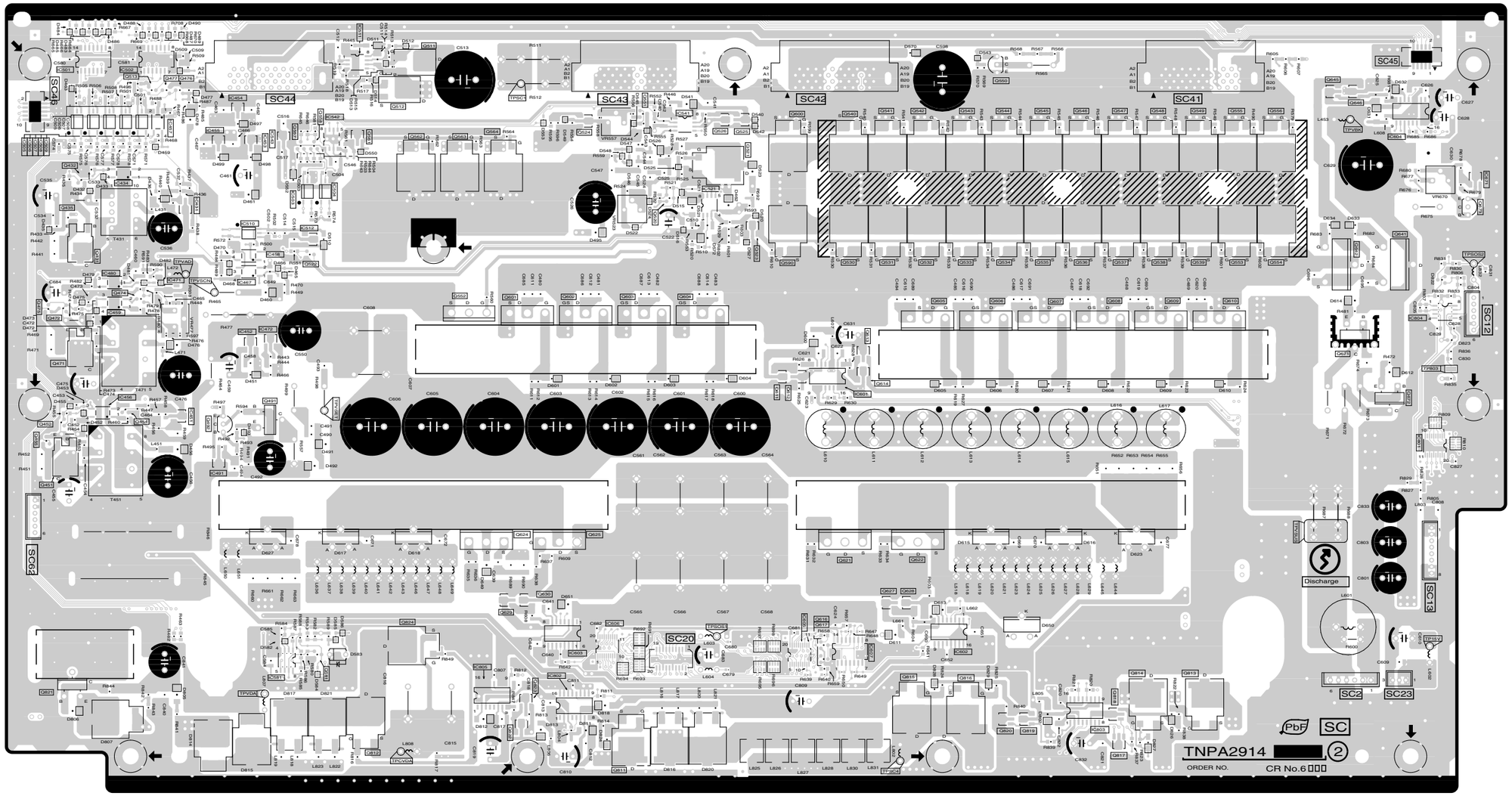
SC-BOARD(FOIL SIDE)
TXNSC10QMS



SC-BOARD TXNSC10QMS

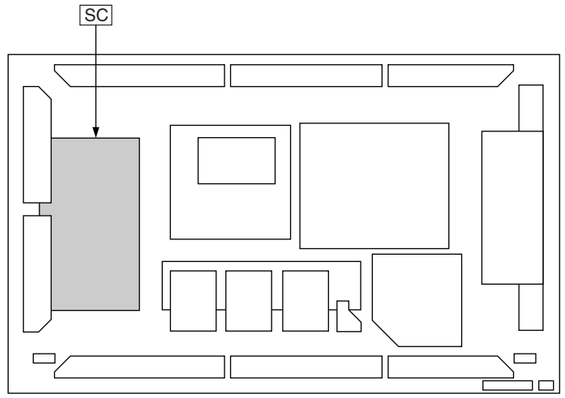
SC-BOARD TXNSC10QMS

SC-BOARD(COMPONENT SIDE)
TXNSC10QMS



SC-BOARD TXNSC10QMS

SC-BOARD TXNSC10QMS



Parts Location

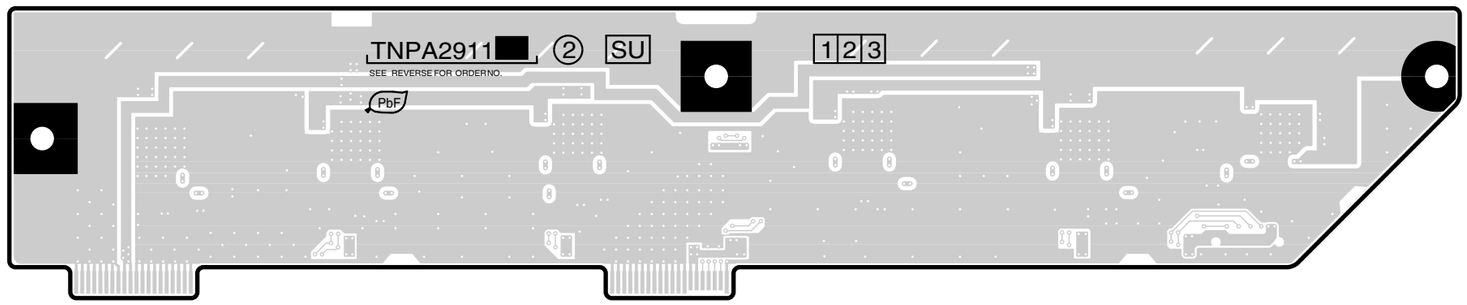
SC-BOARD (FOIL SIDE)					
TRANSISTOR		**TP**		TP55	D-5
Q6491	H-3	TP1	B-2	TP56	D-5
Q6492	H-3	TP2	D-2	TP57	E-5
Q6550	D-5	TP3	A-2	TP58	E-5
Q6552	F-4	TP4	E-4	TP59	F-5
Q6601	F-4	TP6	A-2	TP60	F-5
Q6602	F-4	TP7	A-2	TP61	G-5
Q6603	E-4	TP8	H-2	TP62	G-5
Q6604	E-4	TP9	I-3	TP63	H-5
Q6605	D-4	TP10	E-2	TP70	E-5
Q6606	D-4	TP11	E-2	TP71	A-4
Q6607	C-4	TP12	E-2	TP72	B-4
Q6608	C-4	TP14	E-2	TP73	A-4
Q6609	C-4	TP15	E-2	TP74	A-4
Q6610	B-4	TP16	E-2	TP75	A-5
Q6621	D-3	TP17	E-2	TP76	H-3
Q6622	D-3	TP20	B-3	TP77	G-3
Q6624	F-3	TP21	E-2	TP80	E-5
Q6625	F-3	TP22	E-2	TP81	E-5
Q6641	A-4	TP23	E-2	TP83	E-5
Q6642	B-4	TP24	E-2	TP84	E-5
Q6671	A-4	TP25	E-2	TP6804	A-3
Q6672	A-3	TP26	E-2	TP6806	A-3
Q6673	A-4	TP27	E-2	TP6808	E-4
Q6821	I-2	TP28	E-2	TP6809	A-2
		TP29	E-2	TP6810	A-5
		TP30	I-5	TP6811	A-4
		TP31	E-5	TP6813	A-4
		TP40	B-5	TP6814	I-3
		TP41	B-5	TP6815	A-3
		TP42	B-5	TP6818	A-4
		TP43	B-5	TP6819	A-4
		TP44	B-5	TP6820	A-4
		TP45	B-5	TP6821	A-4
		TP46	H-5	TP6823	B-2
		TP47	H-5		
		TP48	H-5		
		TP49	H-5		
		TP50	H-5		
		TP51	C-5		
		TP54	C-5		

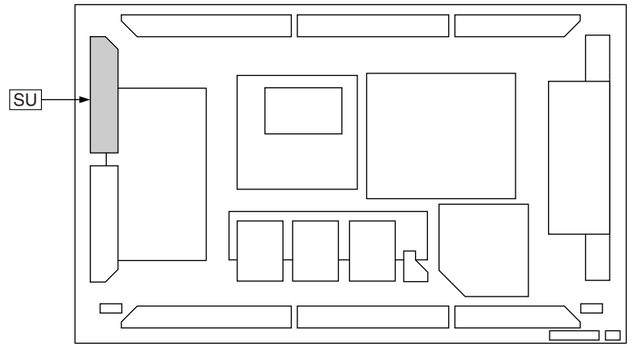
Parts Location

SC-BOARD (COMPONENT SIDE)							
IC		IC6801	I-3	Q6541	F-5	Q6624	D-3
		IC6802	D-2	Q6542	F-5	Q6625	D-3
IC6431	B-5	IC6803	G-2	Q6543	F-5	Q6627	F-2
IC6434	A-5	IC6804	H-4	Q6544	F-5	Q6628	F-2
IC6451	B-3	IC6805	C-2	Q6545	F-5	Q6629	D-2
IC6452	B-4	**TRANSISTOR**		Q6546	G-5	Q6630	D-2
IC6453	B-5	Q6308	G-4	Q6547	G-5	Q6641	H-4
IC6454	B-5	Q6431	A-4	Q6548	G-5	Q6642	H-4
IC6455	B-5	Q6432	A-5	Q6549	G-5	Q6645	H-5
IC6456	A-4	Q6435	A-5	Q6550	F-5	Q6646	H-5
IC6457	B-5	Q6451	A-3	Q6551	D-5	Q6671	H-4
IC6458	A-4	Q6453	A-3	Q6552	C-4	Q6672	H-4
IC6459	B-4	Q6458	A-3	Q6553	G-4	Q6673	I-5
IC6467	B-4	Q6471	A-4	Q6554	H-4	Q6811	D-2
IC6471	B-4	Q6472	A-4	Q6555	G-5	Q6812	C-2
IC6472	B-4	Q6474	A-4	Q6556	C-5	Q6813	G-2
IC6480	A-4	Q6475	A-4	Q6558	H-5	Q6814	G-2
IC6491	B-3	Q6476	B-5	Q6561	C-5	Q6815	F-2
IC6501	A-5	Q6477	B-5	Q6562	C-5	Q6816	F-2
IC6502	B-5	Q6491	B-3	Q6563	C-5	Q6817	G-2
IC6503	B-5	Q6492	B-3	Q6564	C-5	Q6818	G-2
IC6504	C-5	Q6512	C-5	Q6567	B-5	Q6819	F-2
IC6505	A-5	Q6513	B-5	Q6581	C-2	Q6820	F-2
IC6506	A-5	Q6520	D-5	Q6590	E-4	Q6821	A-2
IC6507	A-5	Q6521	E-5	Q6600	E-5	Q6822	D-2
IC6508	A-5	Q6522	B-4	Q6601	D-4	Q6823	D-2
IC6509	A-5	Q6523	E-4	Q6602	D-4	Q6824	C-2
IC6510	B-4	Q6524	D-5	Q6603	D-4	**TP**	
IC6511	C-5	Q6525	E-5	Q6604	E-4	TP6803	I-4
IC6512	B-4	Q6526	E-5	Q6605	F-4	TP15V	I-2
IC6521	E-5	Q6530	E-4	Q6606	F-4	TPAVAD	B-4
IC6541	E-5	Q6531	F-4	Q6607	G-4	TPCVDA	C-2
IC6542	C-5	Q6532	F-4	Q6609	G-4	TPSC1	D-5
IC6543	B-5	Q6533	F-4	Q6610	G-4	TPSC4	F-2
IC6581	B-2	Q6534	F-4	Q6611	E-4	TPSOS1	E-2
IC6601	E-4	Q6535	F-4	Q6612	E-4	TPSOS2	I-4
IC6602	F-2	Q6536	G-4	Q6613	E-4	TPVBK	H-5
IC6603	D-2	Q6537	G-4	Q6614	E-4	TPVDA	B-2
IC6604	H-5	Q6538	G-4	Q6616	E-2	TPVSCN	B-4
IC6605	E-2	Q6539	G-4	Q6617	E-2	TPVSET	C-3
IC6606	D-2	Q6540	E-5	Q6621	E-3	TPVSUS	H-3
IC6607	E-2			Q6622	F-3		
IC6671	I-5						

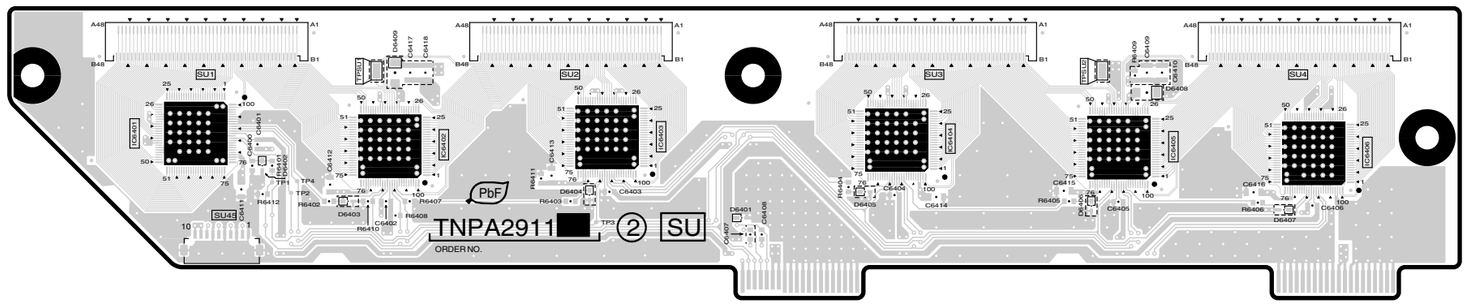
12.16. SU-Board

SU-BOARD(FOIL SIDE)
TNPA2911





SU-BOARD(COMPONENT SIDE)
TNPA2911



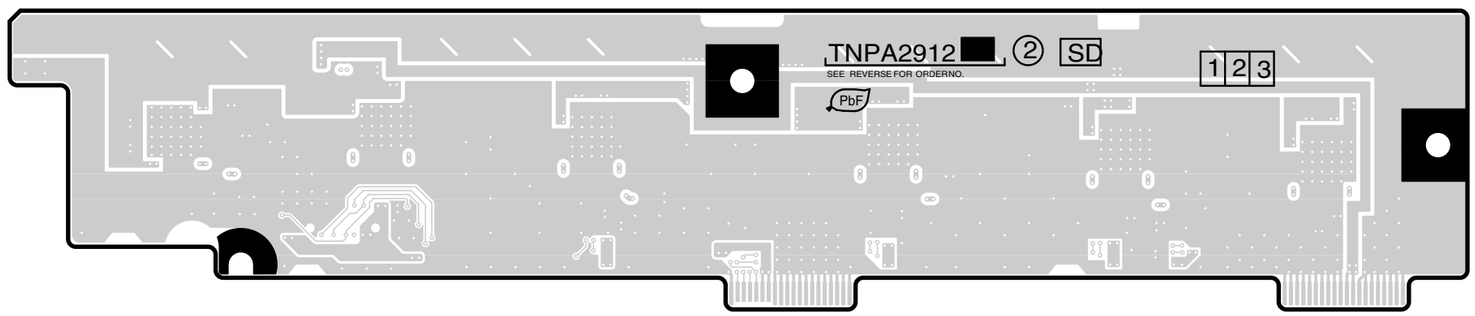
SU-BOARD TNPA2911

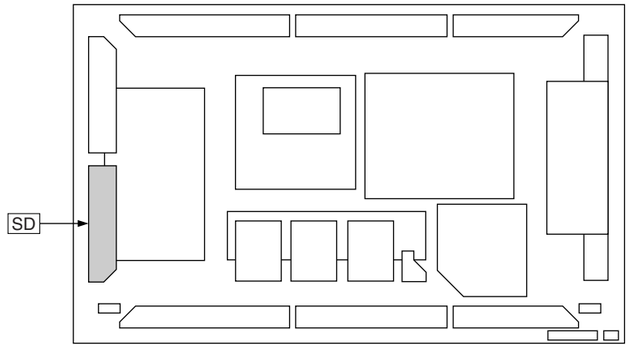
SU-BOARD TNPA2911

A B C D E F G H I

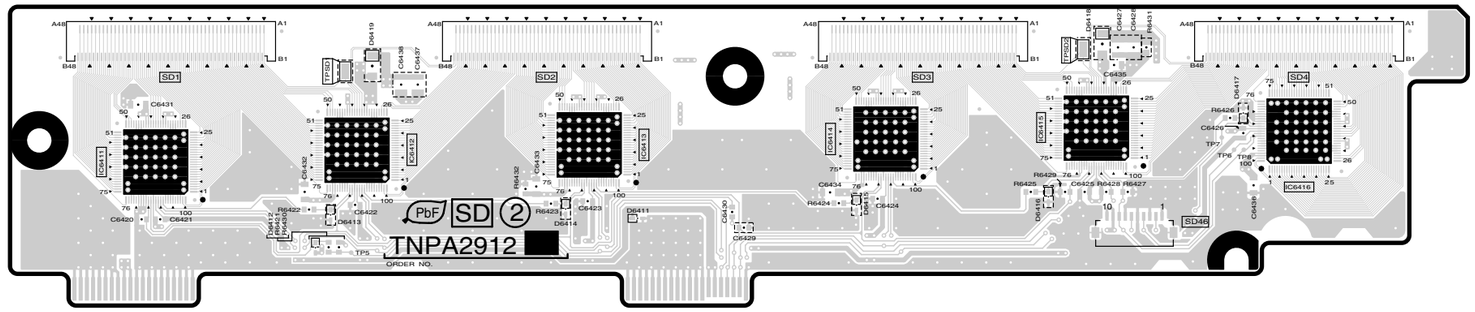
12.17. SD-Board

SD-BOARD(FOIL SIDE)
TNPA2912





SD-BOARD(COMPONENT SIDE)
TNPA2912

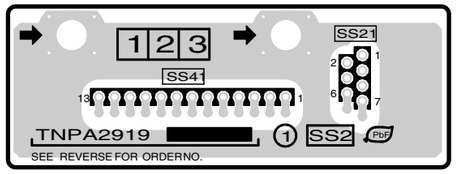


SD-BOARD TNPA2912

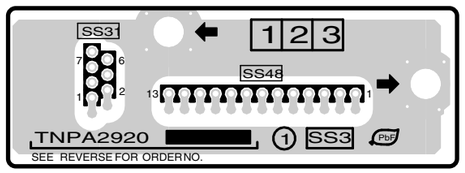
SD-BOARD TNPA2912

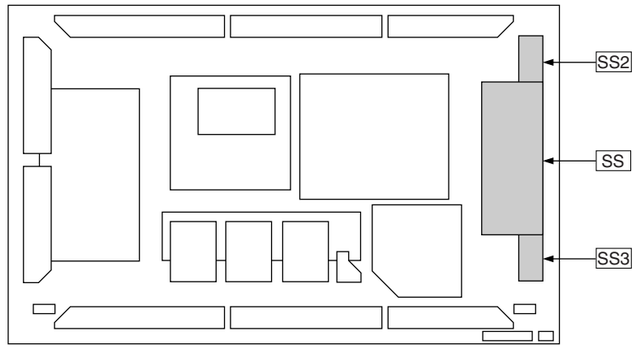
12.18. SS, SS2 and SS3-Board

SS2-BOARD(FOIL SIDE)
TNPA2919



SS3-BOARD(FOIL SIDE)
TNPA2920

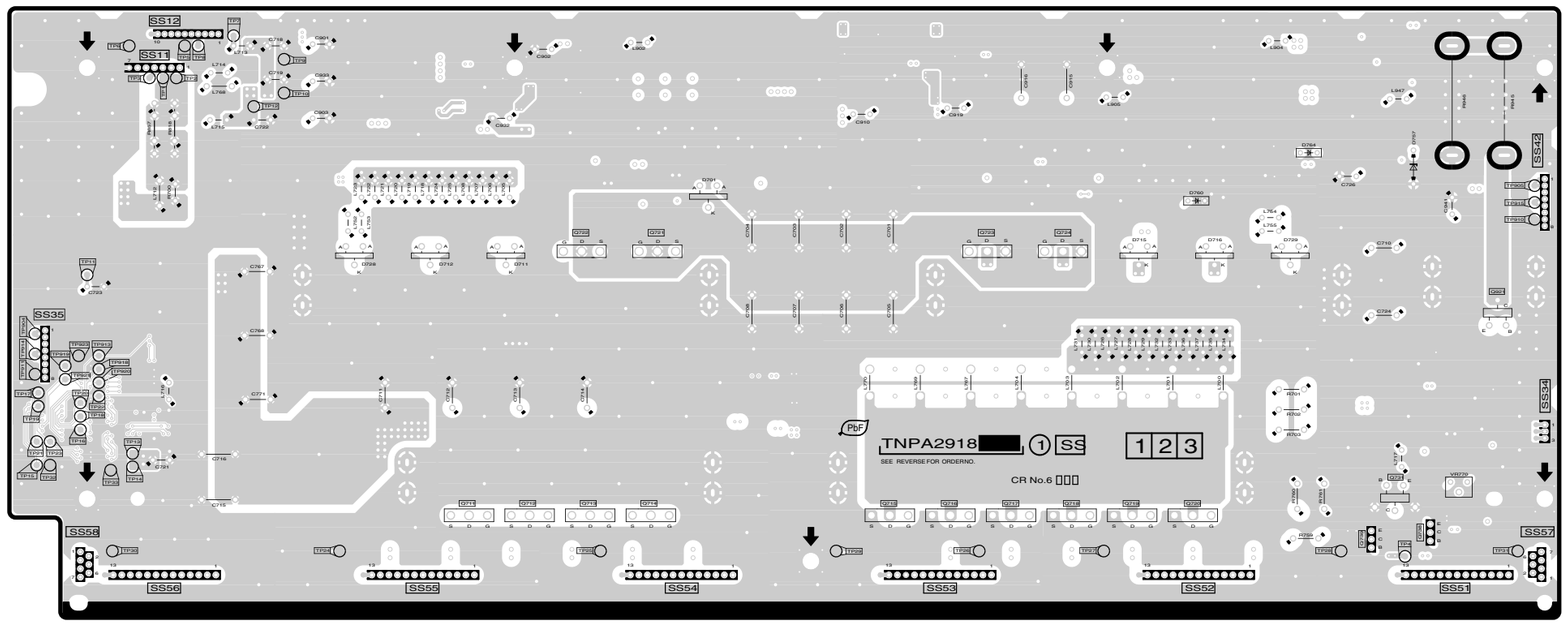




Parts Location

SS-BOARD (FOIL SIDE)					
TRANSISTOR		**TP**		TP23	A-2
Q6711	C-2	TP1	A-4	TP24	B-2
Q6712	C-2	TP2	A-4	TP25	C-2
Q6713	C-2	TP3	A-4	TP26	E-2
Q6714	C-2	TP4	F-2	TP27	E-2
Q6715	D-2	TP5	B-4	TP28	F-2
Q6716	E-2	TP6	A-4	TP29	D-2
Q6717	E-2	TP7	B-4	TP30	A-2
Q6718	E-2	TP8	B-4	TP31	G-2
Q6719	E-2	TP9	B-4	TP32	A-2
Q6720	F-2	TP10	B-4	TP33	A-2
Q6721	C-3	TP11	A-3	TP6904	A-3
Q6722	C-3	TP12	B-4	TP6905	G-3
Q6723	E-3	TP13	A-2	TP6910	G-3
Q6724	E-3	TP14	A-2	TP6911	A-2
Q6731	F-2	TP15	A-2	TP6913	A-3
Q6738	G-2	TP16	A-2	TP6914	A-3
Q6739	F-2	TP17	A-2	TP6915	G-3
Q6921	G-3	TP18	A-2	TP6918	A-2
		TP19	A-2	TP6919	A-2
		TP20	A-2	TP6920	A-2
		TP21	A-2	TP6921	A-2
		TP22	A-2	TP6923	A-3

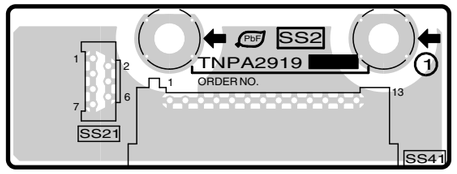
SS-BOARD(FOIL SIDE)
TXNSS10QMS



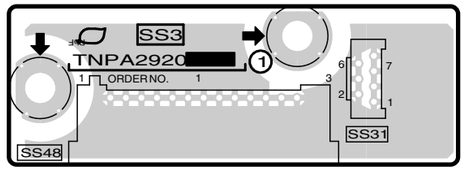
SS-BOARD TXNSS10QMS
SS2-BOARD TNPA2919
SS3-BOARD TNPA2920

SS-BOARD TXNSS10QMS
SS2-BOARD TNPA2919
SS3-BOARD TNPA2920

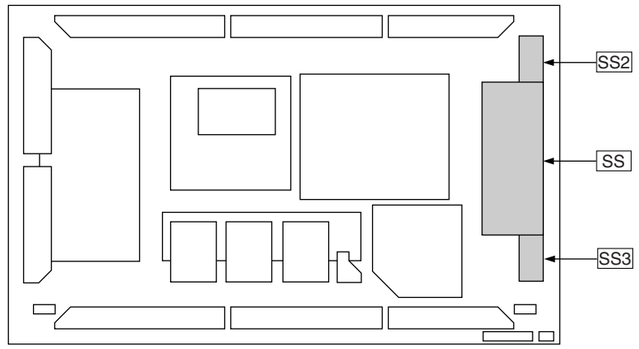
SS2-BOARD(COMPONENT SIDE)
TNPA2919



SS3-BOARD(COMPONENT SIDE)
TNPA2920



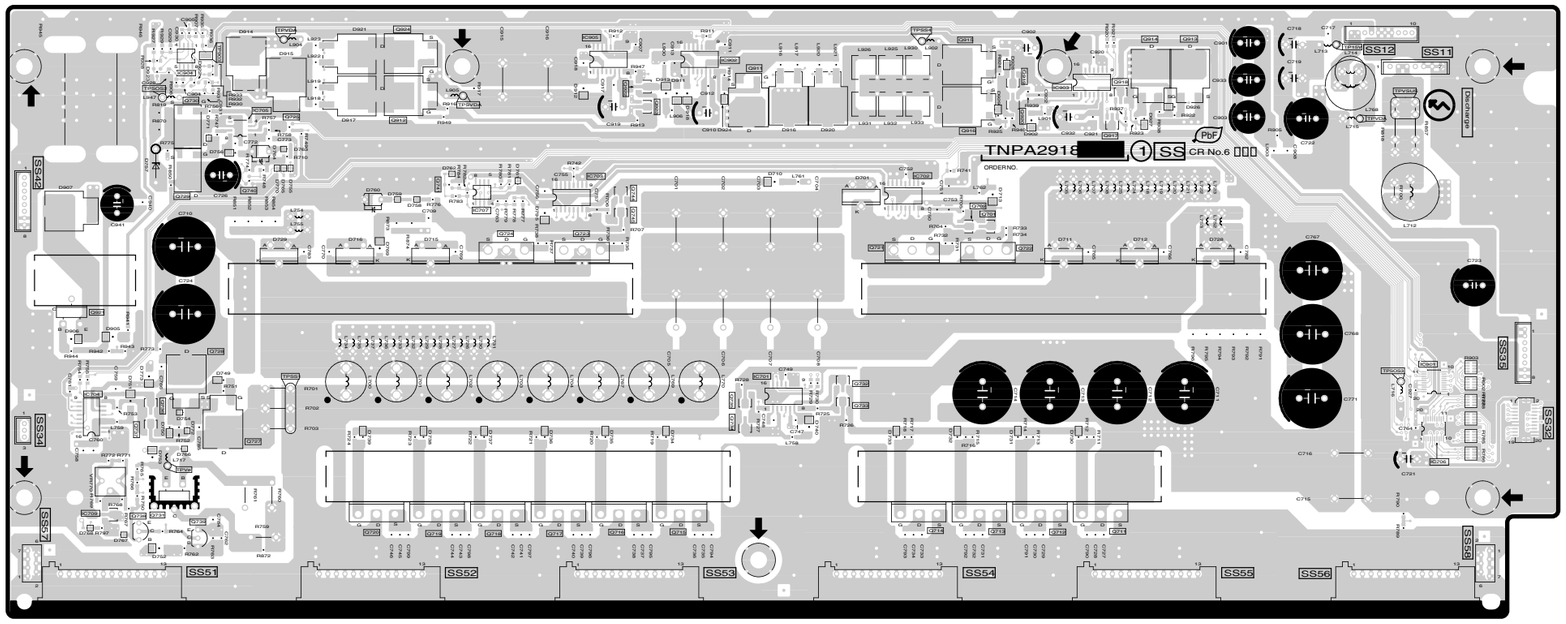
SS-BOARD(COMPONENT SIDE)
TXNSS10QMS



Parts Location

SS-BOARD (COMPONENT SIDE)

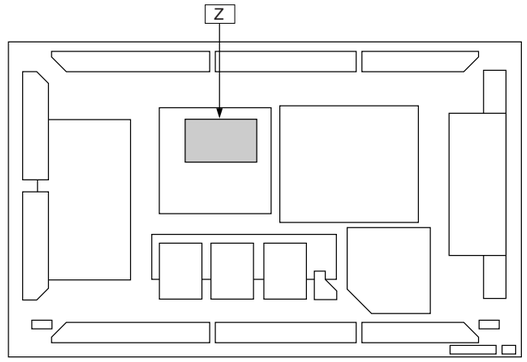
IC					
IC6701	D-2	Q6718	C-2	Q6912	B-4
IC6702	E-3	Q6719	C-2	Q6913	F-4
IC6703	C-3	Q6720	B-2	Q6914	E-4
IC6704	A-2	Q6721	D-3	Q6915	E-4
IC6705	B-4	Q6722	E-3	Q6916	E-4
IC6706	G-2	Q6723	C-3	Q6917	E-4
IC6707	C-3	Q6724	C-3	Q6918	E-4
IC6709	A-2	Q6725	B-4	Q6919	E-4
IC6901	G-3	Q6727	B-2	Q6920	E-4
IC6902	D-4	Q6728	B-3	Q6921	A-3
IC6903	E-4	Q6729	A-3	Q6922	C-4
IC6904	A-4	Q6730	A-4	Q6923	C-4
IC6905	C-4	Q6731	A-2	Q6924	B-4
TRANSISTOR		Q6732	D-3	**TP**	
Q6701	E-3	Q6733	D-2	TP6903	B-4
Q6702	E-3	Q6734	D-2	TP15V	F-4
Q6711	E-2	Q6735	D-2	TPSOS2	A-4
Q6712	E-2	Q6736	A-2	TPSOS3	F-3
Q6713	E-2	Q6737	A-2	TPSS1	B-2
Q6714	E-2	Q6738	A-2	TPSS4	E-4
Q6715	D-2	Q6739	B-2	TPSVDA	C-4
Q6716	C-2	Q6740	B-3	TPVDA	B-4
Q6717	C-2	Q6741	C-3	TPVDA	F-4
		Q6744	C-3	TPVe	A-2
		Q6745	C-3	TPVSUS	G-4
		Q6911	D-4		



SS-BOARD TXNSS10QMS
SS2-BOARD TNPA2919
SS3-BOARD TNPA2920

SS-BOARD TXNSS10QMS
SS2-BOARD TNPA2919
SS3-BOARD TNPA2920

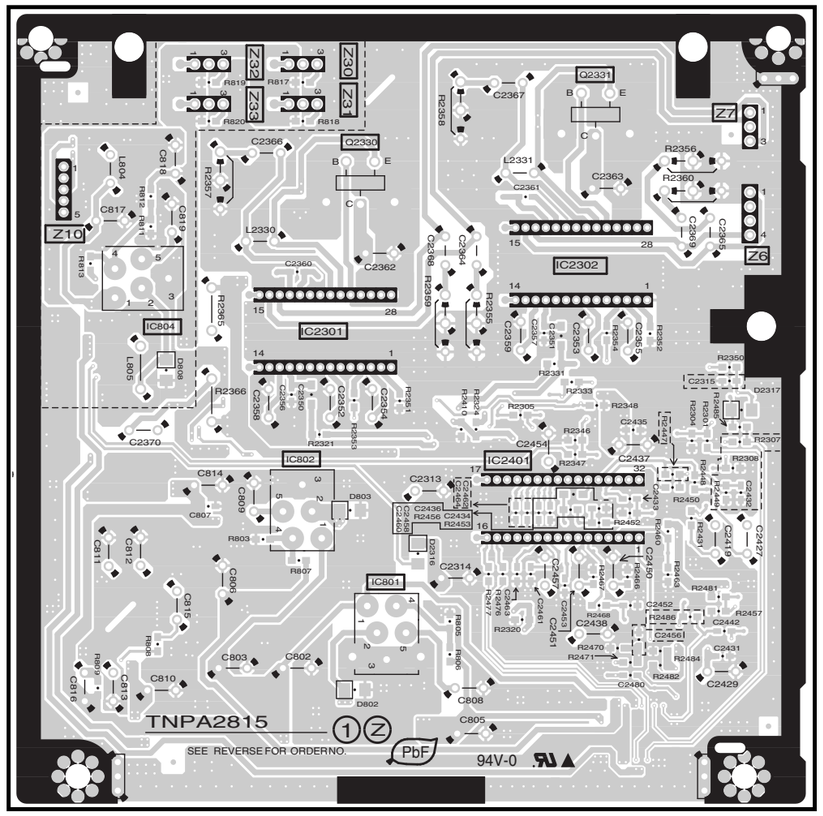
12.19. Z-Board



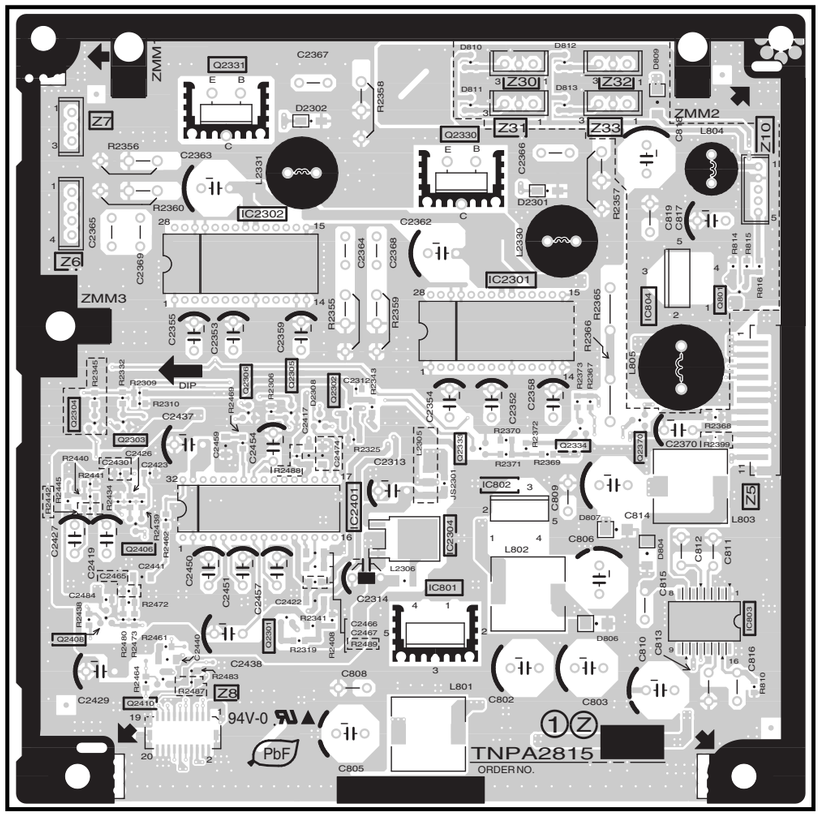
Parts Location

Z-BOARD			
IC		**TRANSISTOR**	
IC2301	B-3	Q2301	F-2
IC2301	G-3	Q2302	F-3
IC2302	C-3	Q2303	F-3
IC2302	F-4	Q2304	E-3
IC2304	G-2	Q2305	F-3
IC2401	C-2	Q2306	F-3
IC2401	F-2	Q2330	B-4
IC801	B-2	Q2330	G-4
IC801	G-2	Q2331	C-4
IC802	B-2	Q2331	F-4
IC802	G-2	Q2333	G-3
IC803	H-2	Q2334	G-3
IC804	A-3	Q2370	H-3
IC804	H-3	Q2406	F-2
		Q2408	E-2
		Q2410	F-2
		Q801	H-3

Z-BOARD(FOIL SIDE)
TNPA2815



Z-BOARD(COMPONENT SIDE)
TNPA2815

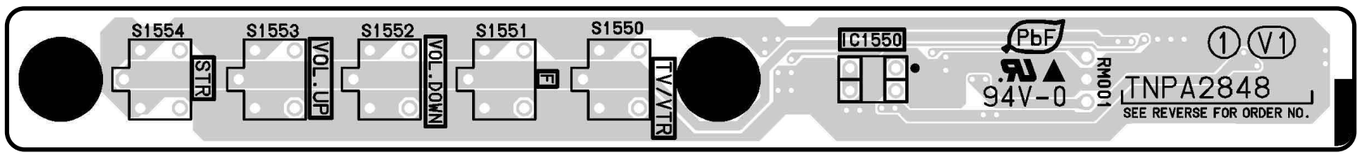


Z-BOARD TNPA2815

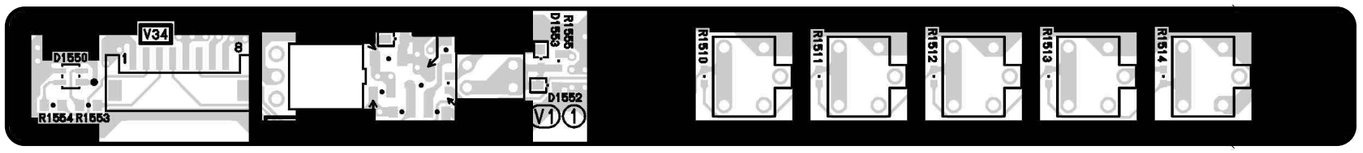
Z-BOARD TNPA2815

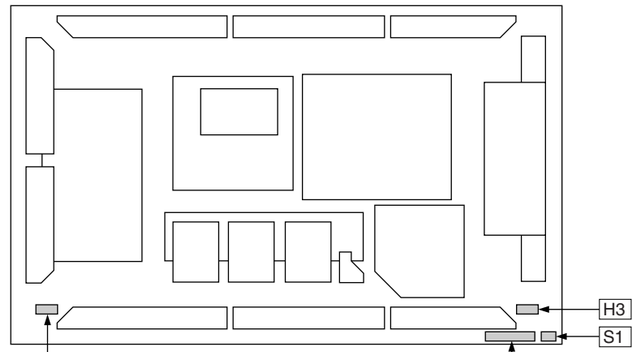
12.20. V1, S1 and H3-Board

V1-BOARD(FOIL SIDE)
TXNV110QJS

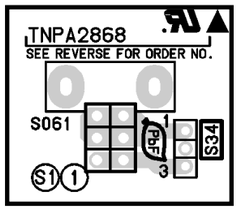


V1-BOARD(COMPONENT SIDE)
TXNV110QJS

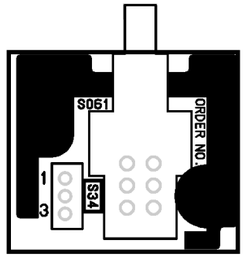




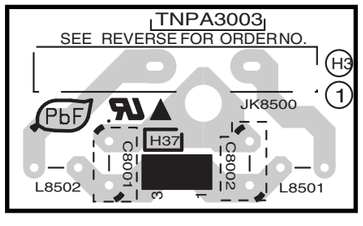
S1-BOARD(FOIL SIDE)
TNPA2868AB



S1-BOARD(COMPONENT SIDE)
TNPA2868AB



H3-BOARD
TNPA3003



V1-BOARD TXNV110QJS
S1-BOARD TNPA2868AB
H3-BOARD TNPA3003

V1-BOARD TXNV110QJS
S1-BOARD TNPA2868AB
H3-BOARD TNPA3003

Block and Schematic Diagrams

Schematic Diagram Notes

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacture's specified parts.

Notes:

1. **Resistor**
 All resistors are cabon 1/4W resistor, unless marked as follows:
 Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).
 - ◯ : Nonflammable
 - △ : Solid
 - ◪ : Wire Wound
 - ⊠ : Metal Oxide
 - ◎ : Metal Film
 - ⊗ : Fuse**:**
2. **Capacitor**
 All capacitors are ceramic 50V capacitor, unless marked as follows:
 Unit of capacitance is F, unless otherwise noted.
 - ⊗ : Temperature Compensation
 - Ⓜ : Polyester
 - ⓜ : Metalized Polyester
 - ⊠ : Polypropylene
 - +|| : Electrolytic
 - NP|| : Bipolar
 - Ⓣ : Dipped Tantalum
 - Ⓩ : Z-Type
3. Coil
 Unit of inductance is H, unless otherwise noted.
4. Test Point
 - ⚲ : Test Point position
5. Earth Symbol
 - ⏚ : Chassis Earth (Cold)
 - ⏚ : Line Earth (Hot)
6. Voltage Measurement
 Voltage is measured by a DC voltmeter.
 Conditions of the measurement are the following:
 Power Source AC220-240V, 50/60Hz
 Receiving Signal Colour Bar signal (RF)
 All customer's controls Maximum positions
7. Number in red circle indicates waveform nember.
 (See waveform pattern table.)
8. When arrow mark (↗) is found, connection is easily found from the direction of arrow
9. Indicates the major signal flow. : Video ➡ Audio ⇨
10. This schematic diagram is the latest at the time of printing and subject to change without notice.

Remarks:

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.
 The circuit is defined by HOT and COLD indications in the schematic diagram. Take the follwing precautions.
 All circuits, except the Power Circuit, are cold.
 Precautions
 a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
 b. Do not short- circuit the hot and cold circuits or a fuse may blow and parts may break.
 c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may blow.
 Connect the earth of instruments to the earth connection of the circuit being measured.
 d. Make sure to disconnect the power plug before removing the chassis.
2. Following diodes are interchangeable.
 MA150- MA162 (Replacement part)

THIS PAGE IS INTENTIONALLY LEFT BLANK.

13 Replacement panel handling precautions and replacement procedure

Replacement panel handling precautions and replacement procedure

Model 50XP37 42WP37

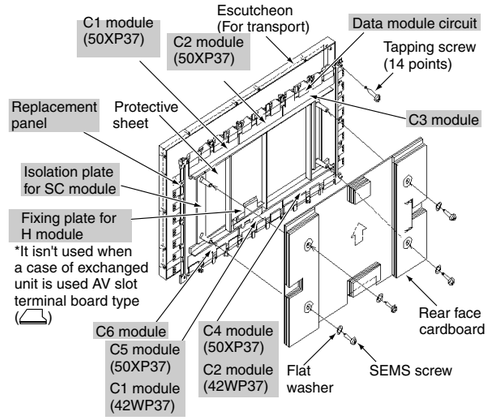
*Some portions of the following description are diffrent from 42WP37 as this is written based on 50XP37.
For example, 42WP37 has C1 and C2 modules only, 50XP37 has 6 modules of C1 to C6.
The procedure and precautions are the same for both modeuls.

1 1 Replacement panel, Package specification drawing and overview

● **Main parts to be removed (Returned and reused parts)**
- External box, shock absorbing material, protective bags
- Escutcheon (For transport)
- Rear face cardboard
- (Panel) protective sheet
- SEMS screw × 4
- Flat washer × 4
- Tapping screw × 14

● **Parts used for replacement**
(Parts not removed:)

Panel
- Data module circuit
- C1 to C6 module
(Integrated for static electricity protection etc.)
- Fixing plate for H module (*)
- Isolation plate for SC module

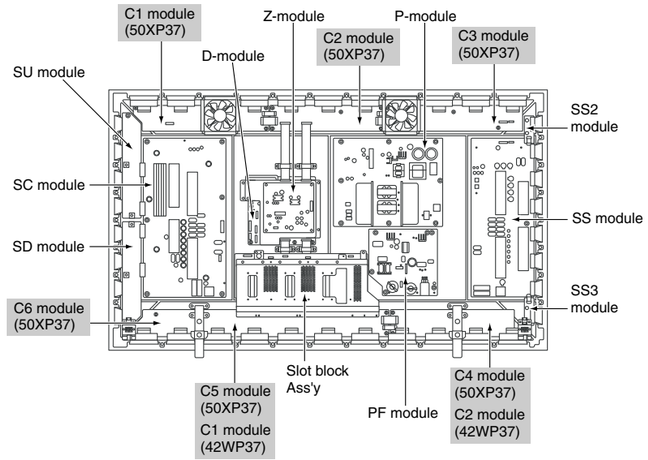


2 Replacement set, Parts layout diagram and overview

Remove and reuse PARTS OTHER THAN THOSE BELOW from the replacement set "Part replacement"

Panel
- Data module circuit
- C1 to C6 module
(Integrated for static electricity protection etc.)
- Fixing plate for H module
- Isolation plate for SC module

Note :Some installation parts and a figure are different depends on model.
:Fans are installed only on 50XP37.



2 Panel handling precautions

- The glass used in the plasma panel is thin, and its structure is extremely susceptible to impact, so be very careful during handling not to damage the unit by dropping, tipping over, hitting or subjecting to any other impact.
- Numerous flexible printed leads with extremely soft structure are used around the panel. Be very careful during handling not to damage these by pulling, bending or subjecting to any other excessive loads.
"The C1 to C6 module and data module circuit are connected with flexible leads (electrostatic protection)."
"Slanted insertion should not be attempted during flexible lead connection, as this will damage the circuit by creating an electrical short."
- A protective sheet is attached to the back of the replacement panel to prevent scratching and deposition of debris. Before assembly, be sure to completely remove the protective sheet, wipe the surface with a soft cloth, remove the stand pole brackets (starting with the set to be replaced), and mount on the replacement panel.
- The replacement panel does not have stand pole brackets (2 points)
Remove the stand pole brackets from the set to be replaced before mounting the replacement panel.

3 Replacement work procedure and precautions

Preparation
- Screwdrivers, pliers and other tools
- Stand and placement mats
- Cloth for wiping glass surface

Repair panel side

Remove the replacement panel from the packaging box.
- Reuse the removed outer box and shock absorbing materials when returning a panel for replacement.
- Be careful of foreign matter such as screws on the placement mat, as this will damage the panel.

Remove rear face cardboard. Mount two stand pole sets removed from the replacement set. — Using placement mat
- Place the panel in the stand.

Remove the escutcheon for transport. — Using stand
- Do not use the removed tapping screws for the replacement set.

Mount PCBs,fan,lead wires, metal fittings and screws, etc, are removed from the replacement set. — Using stand
- Beware of slanted insertion or floating connection during lead insertion.
- Completely peel off the protective sheet on the back of the replacement panel, and wipe off any debris and fingerprints etc.
- Do not remove isolation plate for SC module from replacement panel.
- Do not remove fixing plate for H module from replacement panel. (except a case of exchanged unit is used AV slot terminal board type)

Mount the back cover and the escutcheon removed from the replacement set. — Using stand

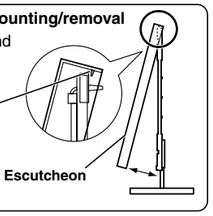
Connection of each cord and cable [Preparation for turning on] — Using stand

Replacement set side

Remove the back cover and the escutcheon. — Using stand

Remove the two stand pole brackets. — Using placement mat

Escutcheon mounting/removal
Hand the left and right claws of the escutcheon with the hook shaped parts.



Remove PCBs, fan,lead wires, metal fittings and screws etc. — Using placement mat

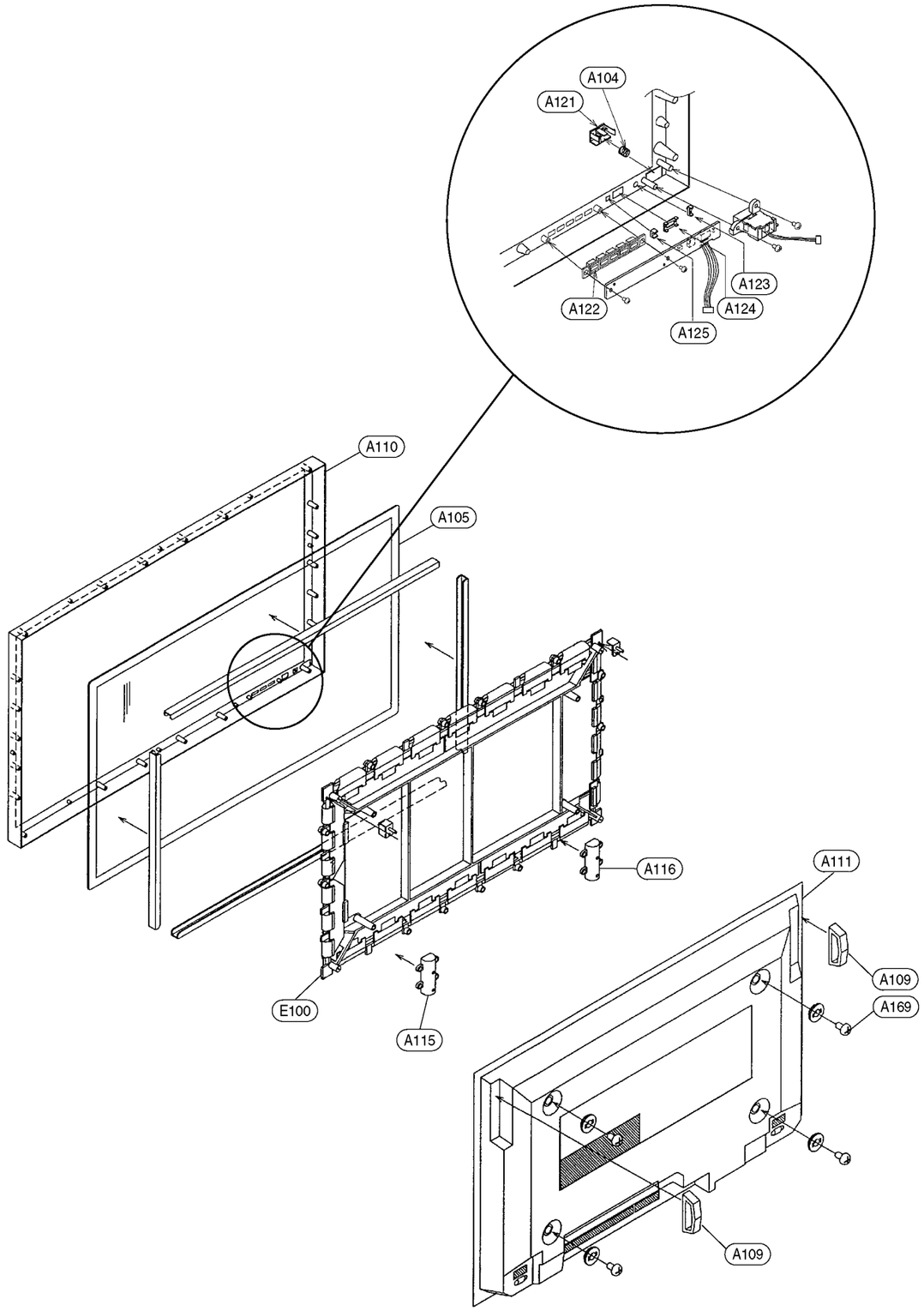
Mount the escutcheon for transport and rear face card-board on the replaced panel. — Using placement mat
- Be careful not to trap fingers between the escutcheon and panel.

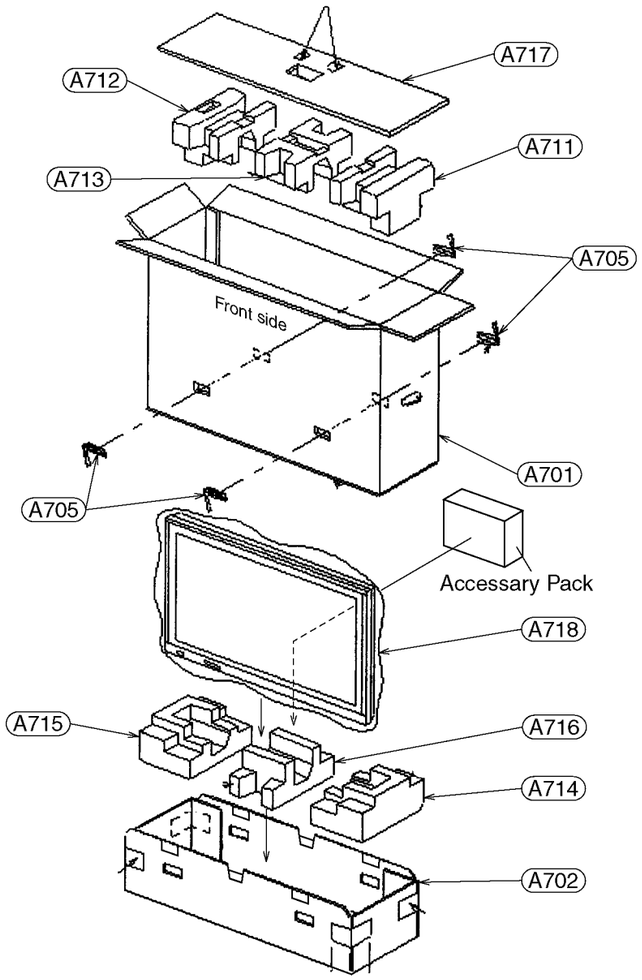
Package the replaced panel with the remaining packaging box materials.

Part replacement

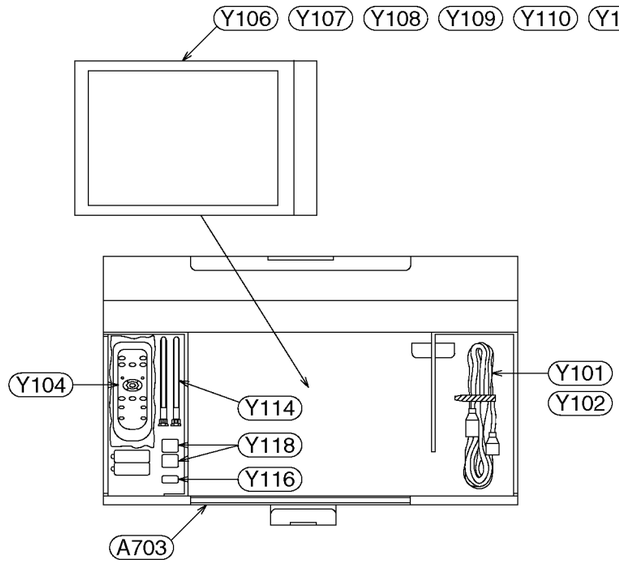
Request to the person in charge of service
After all replacement work has been completed and before turning on the power supply, please check that all flexible leads and connectors have been correctly inserted, that there are no remaining required parts, and that no unnecessary parts have been fitted.
After replacement work, some electrical adjustments may be required. See the service manual for details.

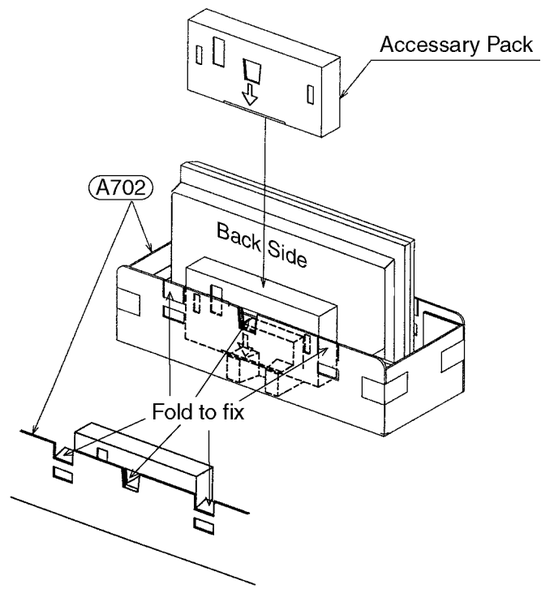
14 Parts Location





•Accessary Pack





15 Chassis and Cabinet Replacement Parts List

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

NOTICE:

- The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.
- The PC board assembly with ∗ mark is no longer available after the end of the production.
- Location No. of Ixxxx (IC: integrated circuit) in the SEMICONDUCTORS section indicates Icxxxx on the Schematic Diagrams. (E.g. I1001 is equalized to IC1001.)

Model : 50XP37C/50XP37E/50XP37F/50XP37H

Capacitors CD : Ceramic Disk PF : Plastic Film EL : Electrolytic
Resistors CF : Carbon Film CC : Carbon Composition MF : Metal Film
OMF : Oxide Metal Film VR : Variable Resistor FR : Fusible Resistor
(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

Location No.	Parts No.	Description
#1 : [50XP37C]		
#2 : [50XP37E]		
#3 : [50XP37F]		
#4 : [50XP37H]		
CAPACITORS		
C403	72790090	CERAMIC DISC,2200PF,M
C404	72792010	CERAMIC DISC,4700PF,Z
C405	72792010	CERAMIC DISC,4700PF,Z
C466	72792007	CERAMIC DISC,100PF,K
C468	72792015	ELECTROLYTIC,330uF,450V
C469	72792015	ELECTROLYTIC,330uF,450V
C548	72790092	ELECTROLYTIC,100uF,25V
C556	72790093	ELECTROLYTIC,22uF,50V
C560	72792009	CERAMIC DISC,220PF,K
C563	72792011	CERAMIC DISC,1000PF,K
C564	72792004	CERAMIC DISC,100PF,K
C566	72792008	CERAMIC DISC,1000PF,K
C570	72792006	CERAMIC DISC,470PF,K
⚠ C901	72792012	PLASTIC FILM,1uF,250V
C902	72792003	CERAMIC DISC,220PF,K
C903	72792003	CERAMIC DISC,220PF,K
⚠ C904	72792003	CERAMIC DISC,220PF,K
⚠ C905	72792003	CERAMIC DISC,220PF,K
⚠ C906	72792014	PLASTIC FILM,1uF,250V
C912	72792013	PLASTIC FILM,0.22uF,250V
C921	72792005	CERAMIC DISC,220PF,K
C6427	72792029	ELECTROLYTIC,1000uF,25V
⚠ C6524	72792002	CERAMIC DISC,1000PF,J,200V
⚠ C6525	72792002	CERAMIC DISC,1000PF,J,200V
C6639	72792031	ELECTROLYTIC,150uF,200V
C6646	72792030	ELECTROLYTIC,120uF,35V
C9958	72792032	ELECTROLYTIC,2.2uF,25V
C9959	72792032	ELECTROLYTIC,2.2uF,25V
RESISTORS		
R406	72792019	FUSIBLE, 150 OHM,5WJ
R410	72792170	WIRE WOUND, 20 OHM, 10WJ
R411	72792171	FUSIBLE, 10 OHM
R443	72792172	CONTROL, 2K OHMB
R541	72792173	METAL OXIDE, 0.47 OHM, 1WJ
R542	72792173	METAL OXIDE, 0.47 OHM, 1WJ
R543	72792173	METAL OXIDE, 0.47 OHM, 1WJ

Location No.	Parts No.	Description
R544	72792173	METAL OXIDE, 0.47 OHM, 1WJ
R590	72792025	CONTROL, 1K OHMB
R605	72792028	CONTROL,50K OHMB
R624	72792226	METAL OXIDE, 0.47 OHM, 1WJ
R641	72792227	CONTROL,3K OHMB
R651	72792228	METAL OXIDE, 220 OHM, 1WJ
R661	72792229	CONTROL,50K OHMB
R689	72792230	METAL OXIDE, 100 OHM, 3WJ
⚠ R901	72792018	SOLID, 1M OHM, 1/2WK
⚠ R902	72792018	SOLID, 1M OHM, 1/2WK
R6443	72792026	CONTROL, 2K OHMB
R6464	72792273	METAL OXIDE, 270K OHM, 2WJ
R6477	72792027	CONTROL,50K OHMB
R6557	72792274	METAL OXIDE, 470 OHM, 1WJ
R6671	72792275	METAL OXIDE, 82 OHM, 2WJ
R6673	72792276	METAL OXIDE, 10K OHM, 1WJ
R6687	72792240	METAL OXIDE, 0.22 OHM, 2WJ
R6688	72792240	METAL OXIDE, 0.22 OHM, 2WJ
R6691	72000989	RESISTOR ARRAY, 470 OHM
R6759	72792241	METAL OXIDE, 100 OHM, 2WJ
R6760	72792242	METAL OXIDE, 4.7K OHM, 1WJ
R6761	72792243	METAL OXIDE, 12K OHM, 2WJ
R6845	72792244	WIRE WOUND, 33 OHM, 15WJ
R6846	72792244	WIRE WOUND, 33 OHM, 15WJ
COILS & TRANSFORMERS		
L401	72000443	BEAD CHOKE, EXCELDR25C
L451	72792035	SW-TRANSFORMER , G4D4A0000048
L452	72000434	BEAD CHOKE, EXCELDR35C
L504	72792247	CHOKE COIL, G0A151ZA0038
L801	72792145	INDUCTION COIL, G1C101ZA0037
L802	72792146	INDUCTION COIL, G1C121ZA0037
L803	72792147	INDUCTION COIL, G1C680ZA0037
⚠ L901	72792148	CHOKE COIL, G0BYYYL00004
⚠ L902	72792148	CHOKE COIL, G0BYYYL00004
⚠ L903	72000447	CHOKE COIL, G0A101L00002
L904	72792149	CHOKE COIL, G0A100GA0013
⚠ L905	72792017	LINE FILTER , ELF17N011A
L951	72000837	COIL, NOISE FILTER, ELKE103FA
L952	72000837	COIL, NOISE FILTER, ELKE103FA
L953	72000837	COIL, NOISE FILTER, ELKE103FA
L954	72000837	COIL, NOISE FILTER, ELKE103FA
L955	72000837	COIL, NOISE FILTER, ELKE103FA

Location No.	Parts No.	Description
L956	72000837	COIL, NOISE FILTER, ELKE103FA
L957	72000837	COIL, NOISE FILTER, ELKE103FA
L958	72000837	COIL, NOISE FILTER, ELKE103FA
L959	72000837	COIL, NOISE FILTER, ELKE103FA
L960	72000837	COIL, NOISE FILTER, ELKE103FA
L1001	72000435	CHIP INDUCTOR, ELJPA100KB
L2330	72792150	INDUCTION COIL, TAL10RP221LB
L2331	72792150	INDUCTION COIL, TAL10RP221LB
L3006	72792040	LC FILTER , J0E8004B0008
L3007	72792151	INDUCTION COIL, G1C2R2K00006
L3510	72000437	EMI FILTER, TLK212T256AL
L3511	72000437	EMI FILTER, TLK212T256AL
L3512	72000437	EMI FILTER, TLK212T256AL
L3513	72000437	EMI FILTER, TLK212T256AL
L3514	72000437	EMI FILTER, TLK212T256AL
L3515	72000437	EMI FILTER, TLK212T256AL
L3516	72000437	EMI FILTER, TLK212T256AL
L3517	72000437	EMI FILTER, TLK212T256AL
L6611	72792152	CHOKE COIL, G0A1R0L00001
L6612	72792152	CHOKE COIL, G0A1R0L00001
L6613	72792152	CHOKE COIL, G0A1R0L00001
L6614	72792152	CHOKE COIL, G0A1R0L00001
L6615	72792152	CHOKE COIL, G0A1R0L00001
L6825	72792153	CHOKE COIL, TLPF097
L6826	72792153	CHOKE COIL, TLPF097
L6827	72792153	CHOKE COIL, TLPF097
L6828	72792153	CHOKE COIL, TLPF097
L8501	72792154	CHOKE COIL, G0A2R5H00003
L8502	72792154	CHOKE COIL, G0A2R5H00003
L9800	72792174	INDUCTION COIL, G1C1R5Z00002
L9955	72792175	INDUCTOR COIL, G1C470M00012
T401	72792232	SWITCHING-TRANS, G4D4A0000072
T402	72792233	SWITCHING-TRANS, ETS19AB1T6AG
T403	72792233	SWITCHING-TRANS, ETS19AB1T6AG
T404	72792234	SWITCHING-TRANS, ETS28LZ126AD
T405	72792235	SWITCHING-TRANS, ETS49LM126AD
T407	72792236	CHOKE TRANS, ETQ11K5AZ
T410	72792237	SWITCHING-TRANS, ETS25AD1J6AH
T501	72792024	SWITCHING-TRANS, ETS49BP116AD
T502	72792023	SWITCHING-TRANS, ETS42BV116AD
T901	72792022	SWITCHING-TRANS, ETS28AZ1E6AD
T6451	72792034	SWITCHING-TRANS , G4D1A0000072
T6461	72792020	SWITCHING-TRANS, ETS13TB139AP
SEMICONDUCTORS		
I1001	72000942	IC, RS5C372A-E2 C1DB00000274
I1550	72790965	IC, B3L000000020
I2301	72792052	IC, LA4901
I2302	72792052	IC, LA4901
I2401	72000939	IC, LINEAR, BH3865S
I3001	72000387	IC, GATE ARRAY, MC14052BF
I3002	72790983	IC, C0JBBR000002
I3003	72000389	IC, CXA1315M, LINEAR
I3004	72790999	LINEAR IC, CXA1875AM
I3005	72000941	IC, MM1519XQ C1AB00001139
I3007	72000783	IC, SN74AHC2G66HDCR
I3101	72792063	IC, PQ07VZ012ZP
I3102	72790973	IC, C0DBZLB00001
I3103	72790990	IC, C1AB00001826
I3104	72000415	IC, PST9128NR, LOGIC
I3105	72790980	IC, C0JBAZ001834
I3108	72000421	IC, AN78L05M, LINEAR
I3109	72000421	IC, AN78L05M, LINEAR
I3201	72790989	IC, C1AB00001720
I3251	72790987	IC, C0ZBZ0000684
I3301	72000411	IC, MM1065ZMR, LINEAR
I3303	72790946	IC, AN80L25RMS
I3304	72790984	IC, C0JBBZ000285
I3305	72000420	IC, JLC1562BF, 50HP81
I3502	72792113	IC, TVRN080
I3699	72792078	IC, S-24C16AFJ
I6401	72001847	IC, SN755866PZP C0HBC0000007
I6402	72001847	IC, SN755866PZP C0HBC0000007
I6403	72001847	IC, SN755866PZP C0HBC0000007
I6404	72001847	IC, SN755866PZP C0HBC0000007
I6405	72001847	IC, SN755866PZP C0HBC0000007

Location No.	Parts No.	Description
I6406	72001847	IC, SN755866PZP C0HBC0000007
I6411	72001847	IC, SN755866PZP C0HBC0000007
I6412	72001847	IC, SN755866PZP C0HBC0000007
I6413	72001847	IC, SN755866PZP C0HBC0000007
I6414	72001847	IC, SN755866PZP C0HBC0000007
I6415	72001847	IC, SN755866PZP C0HBC0000007
I6416	72001847	IC, SN755866PZP C0HBC0000007
I6451	72790944	LINEAR IC, AN1431M
I6452	72790945	LINEAR IC, AN78L15M
I6453	72790945	LINEAR IC, AN78L15M
I6501	72000414	IC, TC74HC14AF TC74HC14A
I6502	72000414	IC, TC74HC14AF TC74HC14A
I6503	72792136	DIODE, B3PBA0000191
I6504	72792136	DIODE, B3PBA0000191
I6505	72792136	DIODE, B3PBA0000191
I6506	72792136	DIODE, B3PBA0000191
I6507	72792136	DIODE, B3PBA0000191
I6508	72792136	DIODE, B3PBA0000191
I6509	72792136	DIODE, B3PBA0000191
I6510	72792136	DIODE, B3PBA0000191
I6511	72790988	IC, C0ZBZ0000735
I6581	72792062	IC, NJM2903M
I6601	72790985	IC, C0ZBZ0000138
I6602	72790985	IC, C0ZBZ0000138
I6603	72790985	IC, C0ZBZ0000138
I6604	72792137	LINEAR IC, M63991FP
I6605	72790978	IC, C0JBAZ000005
I6606	72790978	IC, C0JBAZ000005
I6607	72792070	IC, TC74HC08AF
I7101	72790979	IC, C0JBAZ001604
I8003	72792055	LINEAR-IC , M52346SP
I8004	72792055	LINEAR-IC , M52346SP
I8015	72790417	IC, C0ZBZ0000205
I8016	72790981	IC, C0JBAZ001934
I9001	72790966	IC, C0CBCBD00008
I9002	72790986	IC, C0ZBZ0000551
I9003	72790976	IC, C0JBAB000550
I9005	72790982	IC, C0JBAZ001992
I9009	72790974	IC, C0FBAD000069
I9014	72792138	IC, C0JBAZ000855
I9023	72790943	IC, 74LVC244APWL
I9151	72792060	IC, MN845041-A
I9155	72790994	IC, C3ABPJ000017
I9157	72792074	IC, TLC2933IPWL
I9301	72790992	IC, C1ZBZ0002358
I9303	72790991	IC, C1ZBZ0002357
I9454	72790995	IC, C3ABPJ000043
I9455	72792061	IC, MN84510-A
I9456	72792139	IC, TVRJ957-1
I9601	72792069	IC, TC74ACT244F
I9605	72001844	IC, C1ZBZ0002402
I9608	72792141	IC, C0ZBZ0000764
I9701	72792059	IC, MN102L230
I9702	#1 72793314	IC, M24C64-WMN6T TVRN138
	#2 72793315	IC, M24C64-WMN6T TVRN139
	#3 72793315	IC, M24C64-WMN6T TVRN139
	#4 72793315	IC, M24C64-WMN6T TVRN139
I9704	72792039	IC, HM538123BJ8Z
I9705	72792143	IC, TVRJ953-2
I9707	72792144	IC, C0JBAE000283
I9709	72792109	IC, TVRJ950-3
I9710	72000613	IC, LINEAR, M51957BFP
I9951	72790972	IC, C0DBAMH00006
I9952	72790970	IC, C0DBAFH00021
IC401	72792217	IC, CNC1S171R
IC402	72792218	IC, NJM2903V
IC403	72790418	IC-LINEAR, AN7705F
IC406	72792219	TRANSISTOR, C0DAZZZ00019
IC409	72792220	IC, MIP2E2DMPSCF
IC451	72790969	IC, C0DABZG00001
IC501	72792221	TRANSISTOR, C2ABDA000040
IC502	72792222	TRANSISTOR, C0EBH0000190
IC503	72792223	TRANSISTOR, C0ZBZ0000383
IC504	72792224	IC, TA76431ASTP6
IC511	72792225	TRANSISTOR, C0DAAZG00010
IC520	72792245	TRANSISTOR, C0JBAZ002056

Location No.	Parts No.	Description
IC521	72792246	TRANSISTOR, C0JBAF000367
IC550	72792125	LINEAR IC, UPC24M18AHF
IC551	72790998	IC, C5HABZZ00123
IC552	72790997	IC, C5HABZZ00080
IC555	72790967	IC, C0DAAHG00007
IC801	72790968	IC, C0DAAHG00008
IC803	72790971	IC, C0DBALH00002
IC901	72792058	IC, MIP2E4DMY1TV
IC951	72000924	IC, PQ12SZ1T, 50HP81
IC952	72000382	IC, PQ09SZ1T
Q401	72792251	TRANSISTOR, B1DHBD000002
Q402	72000460	TRANSISTOR, 2SC3311A
Q403	72792252	TRANSISTOR, 2SD1819A
Q404	72792253	TRANSISTOR, 2SB1386RT100
Q405	72790959	TRANSISTOR, B1CBGD000001
Q406	72792254	TRANSISTOR, B1DELQ000002
Q407	72792255	TRANSISTOR, XP0460100L
Q410	72792256	TRANSISTOR, B1CEJQ000001
Q411	72792257	TRANSISTOR, UN5213
Q412	72792258	TRANSISTOR, B1DEER000003
Q413	72792258	TRANSISTOR, B1DEER000003
Q414	72792259	TRANSISTOR, B1DEGQ000030
Q415	72792259	TRANSISTOR, B1DEGQ000030
Q451	72790961	TRANSISTOR, B1DEGR000021
Q452	72000461	TRANSISTOR, 2SD2177R
Q453	72000779	TRANSISTOR, 2SB1434R
Q457	72000462	TRANSISTOR, 2SA1309A
Q501	72792260	TRANSISTOR, 2SD1820A
Q502	72792260	TRANSISTOR, 2SD1820A
Q503	72792261	TRANSISTOR, UN5111
Q504	72792262	FET, 2SK3065T100
Q506	72792263	TRANSISTOR, XP0440100L
Q508	72792264	TRANSISTOR, B1GBCFNA0010
Q510	72792265	TRANSISTOR, 2SB1218ARL
Q514	72792266	TRANSISTOR, B1MBACA00005
Q520	72792267	TRANSISTOR, B1HFCFA00015
Q527	72792268	TRANSISTOR, B1DAFM000003
Q530	72792269	TRANSISTOR, XP4501TX
Q531	72792270	TRANSISTOR, 2SD23750P
Q537	72792271	TRANSISTOR, B1CHND000003
Q547	72792272	TRANSISTOR, 2SD1119
Q552	72790960	FET, B1DEGQ000019
Q553	72000463	TRANSISTOR, 2SB621A
Q903	72790935	TRANSISTOR, 2SD1328-R
Q1540	72000452	TRANSISTOR, 2SD601A
Q2330	72790934	TRANSISTOR, 2SD1499
Q2331	72790934	TRANSISTOR, 2SD1499
Q2370	72000453	TRANSISTOR, 2SB709A
Q3102	72790932	TRANSISTOR, 2SD1030
Q6401	23314737	TRANSISTOR, CHIP FET VDSS50 SMT 2SK620
Q6432	72792176	TRANSISTOR, 2SB0709A
Q6451	72790958	TRANSISTOR, B1BBCJ000003
Q6452	72792176	TRANSISTOR, 2SB0709A
Q6454	72790937	TRANSISTOR, 2SD814A
Q6462	72792176	TRANSISTOR, 2SB0709A
Q6472	72792176	TRANSISTOR, 2SB0709A
Q6491	72000465	TRANSISTOR, 2SC1473A
Q6492	72000465	TRANSISTOR, 2SC1473A
Q6511	72790963	TRANSISTOR, B1DFGL000005
Q6512	72790963	TRANSISTOR, B1DFGL000005
Q6521	72792177	TRANSISTOR, B1DEDS000001
Q6522	72790938	TRANSISTOR, FET, 2SK2993
Q6523	72790938	TRANSISTOR, FET, 2SK2993
Q6524	72790938	TRANSISTOR, FET, 2SK2993
Q6525	72790938	TRANSISTOR, FET, 2SK2993
Q6526	72790938	TRANSISTOR, FET, 2SK2993
Q6527	72790938	TRANSISTOR, FET, 2SK2993
Q6530	72792178	FET, 2SK349400L
Q6531	72792178	FET, 2SK349400L
Q6532	72792178	FET, 2SK349400L
Q6533	72792178	FET, 2SK349400L
Q6534	72792178	FET, 2SK349400L
Q6535	72792178	FET, 2SK349400L
Q6536	72792178	FET, 2SK349400L
Q6537	72792178	FET, 2SK349400L
Q6538	72792178	FET, 2SK349400L

Location No.	Parts No.	Description
Q6539	72792178	FET, 2SK349400L
Q6542	72790942	TRANSISTOR, 2SK373100L
Q6543	72790942	TRANSISTOR, 2SK373100L
Q6544	72790942	TRANSISTOR, 2SK373100L
Q6545	72790942	TRANSISTOR, 2SK373100L
Q6546	72790942	TRANSISTOR, 2SK373100L
Q6547	72790942	TRANSISTOR, 2SK373100L
Q6552	72792179	TRANSISTOR, B1DADU000001
Q6554	72790936	TRANSISTOR, 2SD2185
Q6601	72792180	TRANSISTOR, B1DEJM000005
Q6602	72792180	TRANSISTOR, B1DEJM000005
Q6603	72792180	TRANSISTOR, B1DEJM000005
Q6604	72792180	TRANSISTOR, B1DEJM000005
Q6605	72792180	TRANSISTOR, B1DEJM000005
Q6606	72792180	TRANSISTOR, B1DEJM000005
Q6607	72792180	TRANSISTOR, B1DEJM000005
Q6608	72792180	TRANSISTOR, B1DEJM000005
Q6609	72792180	TRANSISTOR, B1DEJM000005
Q6610	72792180	TRANSISTOR, B1DEJM000005
Q6621	72792181	TRANSISTOR, B1DEJM000003
Q6622	72792181	TRANSISTOR, B1DEJM000003
Q6641	72792182	FET, 2SK3192000LB
Q6642	72792182	FET, 2SK3192000LB
Q6671	72790930	TRANSISTOR, 2SB940A
Q6673	72790933	TRANSISTOR, 2SD1263A
Q6745	72790939	TRANSISTOR, FET, 2SK326800L
Q6746	72790939	TRANSISTOR, FET, 2SK326800L
Q6752	72790931	TRANSISTOR, 2SC1473
Q6753	72790931	TRANSISTOR, 2SC1473
Q6811	72792183	FET, 2SK326900L
Q6812	72792183	FET, 2SK326900L
Q6813	72792183	FET, 2SK326900L
Q6814	72792183	FET, 2SK326900L
Q6815	72792183	FET, 2SK326900L
Q6816	72792183	FET, 2SK326900L
Q6821	72792184	TRANSISTOR, 2SB1193000LB
Q9702	72790929	TRANSISTOR, 2SB1440
Q9703	72792185	TRANSISTOR, 2SK2731T146
Q9704	72792185	TRANSISTOR, 2SK2731T146
D401	72792195	DIODE, B0FBBR000020
D402	72000378	DIODE, MA4082M, ZENER
D403	72000327	DIODE, MA152K
D404	72792064	DIODE, B0EBKT00003
D406	72000343	DIODE, ERA22-10
D407	72790955	DIODE, B0HCMM000001
D408	72792196	ZENER DIODE, MA4180M
D410	72792197	DIODE, MA188
D411	72792198	DIODE, B0BB17000006
D415	72792199	DIODE, B0JAME000081
D419	72792200	DIODE, B0HBSR000005
D420	72792200	DIODE, B0HBSR000005
D421	72000364	DIODE, MA4150M, ZENER
D431	72792201	DIODE, RB520S30TE61
D433	72792202	ZENER DIODE, MA4051NM
D434	72792202	ZENER DIODE, MA4051NM
D451	72790950	DIODE, B0FBBR000019
D457	72790952	DIODE, B0HARR000016
D462	72790949	DIODE, B0EAKT000012
D463	72000325	DIODE, M1FS4
D511	72792203	DIODE, B0JAME000078
D513	72792204	ZENER DIODE, MA4100M
D515	72000355	DIODE, MA4056M, ZENER
D531	72792205	DIODE, B0HDRM000001
D532	72792206	DIODE, MA3J142D0L
D533	72792207	DIODE, MA3D752A
D534	72792207	DIODE, MA3D752A
D537	72792208	DIODE, B0HBRP000006
D543	72792209	ZENER DIODE, MA3200
D544	72792209	ZENER DIODE, MA3200
D545	72792209	ZENER DIODE, MA3200
D546	72792210	DIODE, B0JCND000005
D547	72792211	ZENER DIODE, MA3150M
D548	72792212	ZENER DIODE, MA4075M
D550	72792213	ZENER DIODE, MA4068M
D551	72000787	DIODE, B0BA02700021
D552	72000787	DIODE, B0BA02700021

Location No.	Parts No.	Description
D554	72792214	DIODE, ERA15-01
D557	72000361	DIODE, TMPG10G3
D558	72000361	DIODE, TMPG10G3
D560	72000344	DIODE, RC3B2LFU1
D561	72792215	ZENER DIODE, MA3075MTX
D567	72790951	DIODE, B0HARR000009
D568	72790956	DIODE, B0HFRJ000012
D804	72000789	DIODE, B0JCPD000010
D806	72790948	DIODE, B0BC6R8A0010
D807	72790948	DIODE, B0BC6R8A0010
⚠ D901	72000340	VARISTOR, ERZV10V621P2
⚠ D902	72792001	DIODE, D4SB80Z
D903	72000379	DIODE, EG01C
D904	72792054	DIODE, M1FL20UF4063
D921	72790947	DIODE, B0BA02000024
D922	72000338	DIODE, MA165
D923	72792053	DIODE, LED, LNJ201LPQJA
D1001	72000615	DIODE, MA111
D1550	72000323	LED, LNJ107W5PRW
D1551	72000324	DIODE, MA8056M, ZENER
D1552	72000324	DIODE, MA8056M, ZENER
D1553	72000324	DIODE, MA8056M, ZENER
D2308	72790407	DIODE, MA152
D3001	70115528	DIODE, MA729
D3002	72792127	ZENER DIODE, MA3100M
D3501	72000330	DIODE, MA3056M, ZENER
D3502	72000330	DIODE, MA3056M, ZENER
D3503	72000330	DIODE, MA3056M, ZENER
D3504	72000330	DIODE, MA3056M, ZENER
D3507	72792128	ZENER DIODE, MA8160H
D3508	72792128	ZENER DIODE, MA8160H
D3509	72792128	ZENER DIODE, MA8160H
D3510	72792128	ZENER DIODE, MA8160H
D6401	72792129	ZENER DIODE, MA8056H
D6402	72792129	ZENER DIODE, MA8056H
D6405	72000370	DIODE, D1FL40F4063
D6454	72792075	PHOTO COUPLER, TLP181
D6460	72790954	DIODE, B0HCKS000001
D6461	72790954	DIODE, B0HCKS000001
D6465	72792130	ZENER DIODE, MA8330M
D6466	72792130	ZENER DIODE, MA8330M
D6501	72792051	DIODE , K7GBZEE00006
D6502	72792051	DIODE , K7GBZEE00006
D6503	72792051	DIODE , K7GBZEE00006
D6504	72792051	DIODE , K7GBZEE00006
D6505	72792051	DIODE , K7GBZEE00006
D6506	72792051	DIODE , K7GBZEE00006
D6507	72792051	DIODE , K7GBZEE00006
D6508	72792051	DIODE , K7GBZEE00006
D6515	72792131	ZENER DIODE, MA8240M
D6516	72792131	ZENER DIODE, MA8240M
D6520	72790957	DIODE, B0JCKG000001
D6524	72792132	ZENER DIODE, MA8051L
D6615	72792133	DIODE, B0HBSN000007
D6616	72792133	DIODE, B0HBSN000007
D6617	72792133	DIODE, B0HBSN000007
D6618	72792133	DIODE, B0HBSN000007
D6620	72792065	DIODE, SF20LC30F10
D6621	72792065	DIODE, SF20LC30F10
D6622	72792065	DIODE, SF20LC30F10
D6629	72790953	DIODE, B0HBSM000031
D6807	72792134	DIODE, B0HDSM0000004
D8010	72000331	DIODE, MA153
D8011	72000331	DIODE, MA153
D9001	72792135	ZENER DIODE, MA3036H
D9705	72000367	DIODE, MA3062M, ZENER
D9706	72000367	DIODE, MA3062M, ZENER
D9707	72000367	DIODE, MA3062M, ZENER
D9708	72000367	DIODE, MA3062M, ZENER
D9709	72000367	DIODE, MA3062M, ZENER
D9710	72000367	DIODE, MA3062M, ZENER
D9711	72000367	DIODE, MA3062M, ZENER
D9712	72000367	DIODE, MA3062M, ZENER
D9713	72000367	DIODE, MA3062M, ZENER

Location No.	Parts No.	Description
MISCELLANEOUS		
A151	72000662	SCREW, THEA068N
A152	72000663	SCREW, THEL023Z
A153	72792279	SCREW, THEL027N
A154	72792280	SCREW, THEL035N
A155	72792281	SCREW, THTF003Y
A156	72792282	SCREW, THTF010Z
A157	72792286	SCREW, XTB4+10A
A158	72792287	SCREW, XTBT964
A159	72792288	SCREW, XTS3+10J
A160	72790088	SCREW, XTV3+10J
A161	72792289	SCREW, XTV3+6J
A162	72792290	SCREW, XTW3+8T
A163	72792291	SCREW, XYN3+C8
A164	72792292	SCREW, XYN3+F10
A165	72792293	SCREW, XYN3+F10FZ
A166	72790089	SCREW, XYN3+F8
A167	72792294	SCREW, XYN4+E8
A168	72001017	SCREW, XYN5+C15
A169	72000679	SCREW, XYN8+F20FZ
A170	72792295	SCREW, THTD010N
A171	72792298	SCREW, XYC3+FF8
A172	72792299	SCREW, THTD011
A173	72000678	SCREW, XYN5+C20
A174	72792300	SCREW, XYC4+FJ35FZ
A175	72792277	SCREW, XVG3+J10
A176	72792278	SCREW, XVG3+J12
F405	72792216	FUSE, P130A
⚠ F900	72000743	FUSE, 250V 8A
⚠ F901	72000743	FUSE, 250V 8A
⚠ F902	72792048	FUSE , K5D312BK0012
J3001	72000608	CONNECTOR, K1CB106B0027
J3002	72000610	JACK, K2HA204B0097
J3005	72000611	JACK, K2HA306B0048
J3509	72000429	CONNECTOR, K1FB109B0058
J3513	72000925	JACK,
J8500	72000433	TERMINAL, K4BC02B00013
PR401	72792248	FUSE, K5Y502B00007
PR502	72792249	PROTECTOR, ICP-N50T104
PR509	72792250	FUSE, K5H501Z00005
PR510	72792250	FUSE, K5H501Z00005
RL401	72000647	RELAY, K6B1AGA00086
RL402	72792231	REALY, K6B1AGA00177
RL403	72792049	REALY , K6B1ADA00009
RM001	72000649	REMOCON RECEIVER, PNA4601M05TV
S061	72792043	SWITCH , K0F162B00002
S1550	72000651	SWITCH, EVQPBD05R
S1551	72000651	SWITCH, EVQPBD05R
S1552	72000651	SWITCH, EVQPBD05R
S1553	72000651	SWITCH, EVQPBD05R
S1554	72000651	SWITCH, EVQPBD05R
X501	72792238	CRYSTAL, H2B400400021
X3101	72792037	CRYSTAL, H0J202500002
X9302	72792036	CRYSTAL, H0J200500016
X9350	72792038	CRYSTAL, H0J327200038
X9701	72792186	CRYSTAL, H0J245500013
X9702	72000998	CRYSTAL, H0J921400003
ZN401	72792239	VARISTOR, D4EAD6210001
ZN402	72792239	VARISTOR, D4EAD6210001
PC BOARD ASSEMBLIES		
✻ E201	72792159	CIRCUIT BOARD-C1, TNPA2903
✻ E202	72792160	CIRCUIT BOARD-C2, TNPA2904
✻ E203 #1	72001845	CIRCUIT BOARD-D TZTNP01SCSC
#2	72001846	CIRCUIT BOARD-D TZTNP02SCSH
#3	72001846	CIRCUIT BOARD-D TZTNP02SCSH
#4	72001846	CIRCUIT BOARD-D TZTNP02SCSH
✻ E205	72792105	CIRCUIT BOARD-H3, TNPA3003
✻ E209	72792096	CIRCUIT BOARD-J, TNPA2826
✻ E210	72792156	CIRCUIT BOARD-P, TNPA2890
✻ E211	72792155	CIRCUIT BOARD-PF, TXNPF10QMS
✻ E212	72792168	CIRCUIT BOARD-S1, TNPA2868AB
✻ E213	72792166	CIRCUIT BOARD-SC, TXNSC10QMS
✻ E214	72001849	CIRCUIT BOARD-SD TNPA3129
✻ E215	72792340	CIRCUIT BOARD-SS, TXNSS10QMS
✻ E216	72792167	CIRCUIT BOARD-SS2, TNPA2919

Location No.		Parts No.	Description
✻ E217		72792126	CIRCUIT BOARD-SS3, TNPA2920
✻ E218		72001848	CIRCUIT BOARD-SU TNPA3128
✻ E219		72792169	CIRCUIT BOARD-V1, TXNV110QJS
✻ E220		72792095	CIRCUIT BOARD-Z, TNPA2815
✻ E221		72792161	CIRCUIT BOARD-C3, TNPA2905
✻ E222		72792162	CIRCUIT BOARD-C4, TNPA2906
✻ E223		72792163	CIRCUIT BOARD-C5, TNPA2907
✻ E224		72792164	CIRCUIT BOARD-C6, TNPA2908
ACCESSORIES			
A701	#1	72792332	CARTON-BOX, TPCB51804
	#2	72792336	CARTON-BOX, TPCB51801
	#3	72792339	CARTON-BOX, TPCB51802
	#4	72792301	CARTON-BOX, TPCB51803
⚠ A702		72790115	CARTON BOX(BOTTOM), TPCA97201A
A703		72001059	PAPER BOX, TPDF0737 TPDF0737
A711		72001055	CUSHION, TPDA0510-1
A712		72001056	CUSHION, TPDA0511-1
A713		72000684	CUSHION, UPPER CENTER, 50HP81, TPDA0512
A714		72000685	CUSHION, BOTTOM RIGHT, 50HP81, TPDA0513
A715		72000686	CUSHION(BOTTOM LEFT), TPDA0514
A716		72790381	CUSHION(BOT CENTER), TPDA0515-2
A717		72001058	CUSHION, TPDF0596
A718		72790116	PROTECT COVER, TPEH170
A719		72792302	CUSHION(UPPER/LEFT), TPDA0806
A720		72792303	CUSHION(BOTTOM/LEFT), TPDA0807
A721		72000688	PAD(TOP), TPDF0536
⚠ Y101	#1	72792307	POWER CORD, K2CK3DH00016
⚠	#2	72792313	POWER CORD, K2CN3DH00005
⚠	#3	72792313	POWER CORD, K2CN3DH00005
⚠	#4	72792047	POWER CORD, K2CT3DH00017
⚠ Y102	#2	72792047	POWER CORD, K2CT3DH00017
⚠	#3	72792337	AC CORD(AUSTRALI), K2CK3DH00018
Y104		72792046	REMOCON HAND UNIT, EUR646531
⚠ Y106	#1	72792310	OWNERS MANUAL, (E), TQZW330
⚠	#2	72792320	OWNERS MANUAL, (E), TQZW320
⚠	#3	72792327	OWNERS MANUAL, (E), TQZW325
⚠	#4	72792284	OWNERS MANUAL, (E), TQZW328
⚠ Y107	#1	72792311	OWNERS MANUAL, (C), TQZW331
⚠	#2	72792321	OWNERS MANUAL, (F), TQZW321
⚠	#3	72792328	OWNERS MANUAL, (R), TQZW326
⚠	#4	72792285	OWNERS MANUAL, (C), TQZW329
⚠ Y108	#2	72792322	OWNERS MANUAL, (G), TQZW322
⚠	#3	72792329	OWNERS MANUAL, (K), TQZW327
⚠ Y109	#2	72792323	OWNERS MANUAL, (I), TQZW323
⚠ Y110	#2	72792324	OWNERS MANUAL, (S), TQZW324
Y111		72790396	INST.SHEET , TQZH337
Y112		72792191	SPEAKER REED(RIGHT), TXJSPR0QMS
Y113		72792190	SPEAKER REED(LEFT), TXJSPL0QMS
Y114		72001052	FIXING BAND, TMME187
Y115		72792044	FLAT CORE , J0KD00000071
Y116		72001049	FERRITE CORE, J0KF00000018
Y117		72000692	NOIS FILT, JOKG00000042
Y118		72790384	FILTER-NOISE , J0KG00000054
Y120		72000705	POLY BAG, XZBT6506
CABINET PARTS			
A104		72000661	SPRING, TESD031
A105	#1	72792330	FRONT GALLAS, TKGA5126
	#2	72792193	FRONT GALLAS, TKGA5125
	#3	72792193	FRONT GALLAS, TKGA5125
	#4	72792193	FRONT GALLAS, TKGA5125
A109		72000665	HANDLE, 42WP16A, TKRA20501
A110		72792194	ESCUTCHEON, TTEA0150
A111	#1	72792331	REAR COVER, TTUA0790
	#2	72792335	REAR COVER, TTUA0787
	#3	72792338	REAR COVER, TTUA0788
	#4	72792108	REAR COVER, TTUA0772
A115		72792188	STAND BRACKET(R), TXFMZ020MHS
A116		72792187	STAND BRACKET(L), TXFMZ010MHS
A117		72000666	CUSHION, TMKG252
A118		72000667	CUSHION, 50HP81, TMKG253
A121		72792066	BUTTON, POWER, TBXA28215
A122		72792067	HINDGE, BUTTON, TBXA38903
A123		72000664	LED PANEL, 42WP16A, TKKC5105
A124		72792072	REMOCON RECEIVER, TKPA60302

Location No.		Parts No.	Description
A125		72792073	REMOCON RECEIVER, TKPA63401
A126		72790382	EADG SADOLE , TMME075
A127		72792076	CLAMPER, POWER CORD, TMME225
A128		72792077	BRACKET, TMMX095
A129		72000672	BRACKET, POWER BUTTOM, TMWC006-1, 50HP81
A130	#2	72792315	COVER, TKKL5266
A177	#2	72792333	BD033CAA60TT
A180		72792296	CUSHION(RUBBER), TMMJ074
A181		72792297	CUSHION(RUBBER), TMMJ082
A190		72792189	FAN, FBL08A12LS
A705		72000681	JOINT, TPD169487
E100		72792192	DISPLAY PANEL, MD50H06A1J
E101		72792045	AC INLET , K2AH3H000027

THIS PAGE IS INTENTIONALLY LEFT BLANK.

16 Specifications

Power Source:	AC220-240V 50/60Hz
Power Consumption:	445 W Save off 1.9 W, Save on 1.1 W (stand-by condition) 0.4 W (Power off condition)
Plasma Display panel:	Drive method AC type 16:9 aspect ratio
Contrast Ratio	3000:1
Screen size:	1,106 mm (W) × 622 mm (H) 1,269 mm (diagonal) No. of pixels 1,049,088 (1,366 (W) × 768 (H)) [4,098 × 768 dots]
Operating condition:	
Temperature	34 ℉ - 104 ℉ (0 ℃ - 40 ℃)
Humidity	20 % - 80 %
Connection terminals:	
AV	
Video in	1.0 Vp-p (75-ohm)
S-VIDEO IN (MINI DIN 4PIN)	Y: 1 Vp-p (75-ohm), C: 0.286 Vp-p (75-ohm)
AUDIO IN (RCA PIN JACK × 2)	0.5 Vrms (high impedance)
COMPONENT/RGB	
Y/G	1.0 Vp-p/composite (75-ohm) 0.7 Vp-p/non-composite (75-ohm)
P_B/B	0.7 Vp-p (75-ohm)
P_R/R	0.7 Vp-p (75-ohm)
*RGB signals can be accepted only with “SYNC ON G”	
AUDIO IN (RCA PIN JACK × 2)	0.5 Vrms (high impedance)
PC	
(HIGH-DENSITY D-SUB15PIN)	R,G,B/0.7 Vp-p (75-ohm) HD, VD/1.0 - 5.0 Vp-p (high impedance)
AUDIO IN (M3 JACK)	0.5Vrms (high impedance) Horizontal scanning frequency 15 - 110kHz Vertical scanning frequency 48 - 120Hz
SERIAL	
EXTERNAL CONTROL TERMINAL (D-SUB9PIN)	RS-232C COMPATIBLE
SPEAKERS (External speakers) (6Ω)	16W [8W+8W] (10% THD)
Dimensions (W × H × D):	1,210 mm × 724 mm × 95 mm
Weight (Mass)	approx. 43.5 kg net (main unit only) approx. 48.1 kg net (with speakers)

– END –

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN